Continuing Professional Development in Surgery XVII

Abstracts Book
Increasing the Competence of General Surgeons to Improve the Health Services
Semarang, 27th - 30th October 2020

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Foreword

Assalamu’alaikum Wr. Wb.
Om Swastiyastu,
Shalom,
Namo Budhaya,
Salam Sejahtera

It is with deep satisfaction that I write this Foreword to the Proceedings of the P2B2 PABI XVII held in Semarang October 27-30, 2020

the COVID-19 pandemic has changed our world immeasurably over the past eight months. It has impacted on every aspect of the medical situation around the globe which drastically changed the global strategy on health management. No exeption to field of surgery.

P2B2 PABI continues a tradition of bringing together researchers, academics and professionals experts in Surgery from all over Indonesia.

The conference particularly encouraged the interaction of research students and developing academics with the more established academic community in an informal setting to present and to discuss new and current work. Their contributions helped to make the Conference as outstanding as it has been. The papers contributed the most recent scientific knowledge known in the field of general surgery

These Proceedings will furnish the surgeons and academics of indonesia with an excellent reference book. I trust also that this will be an impetus to stimulate further study and research in our country. I hope this conference in the form of virtual meeting will not makes any difficulties in increasing the competence of general surgeons to improve services.

We would like to thank all authors and participants for their contributions.

Wassalamu’alaikum Wr. Wb

Dr. Benedictus K. Widjajanto, Sp.B, FINACS
Chairman of the committee
P2B2 PABI XVII Semarang
Foreword from Scientific Chairman

Assalamu’alaikum Wr. Wb.
Om Swastiyastu,
Shalom,
Namo Budhaya,
Salam Sejahtera

Dear College,

The surgical science and technology is growing rapidly, every year, new surgical technique, especially minimally invasive surgery, new instrument, new evidence of surgical or medical treatment, etc. are reported. Surgeon, as professional, need to improve their surgical skill and knowledge continuously, to manage surgical case efficient and safely. Indonesian Surgeon Association (PABI) as professional organization has mission to maintain and improve the surgical skill and knowledge of the Indonesian Surgeon. The 17th Continuing Surgical Professional Development (CSPD) is the effort of PABI to articulate their mission, therefore the topic of this CSPD is “Improving competence of Indonesian General Surgeon to improve surgical care”.

The committee provide online lecture, seminar of interesting surgical topics and also presentation of surgical research as podium or poster. Workshop has already been planned, as a lot of handicap in the Covit-19 pandemic era, we cancel this activity. Topics of lectures and seminars are representative topics from Digestive, Surgical Oncology, Cardiothoracic and Vascular, Plastic and Reconstructive, Urology, Orthopedic, Neuro and Pediatric Surgery. Presentation of surgical research will be done by resident, trainee of sub-specialist or general surgeon. Selected paper for podium presentation and for poster will be presented for scientific competition and the winner will get special prize from committee. We provide e-abstract of all lecture, seminar or free paper.

We do hope our college enjoy joining this CSPD, and hoping the lecture and seminar will be useful and fruitful to you all.

Wass.
My best Regard

Ignatius Riwanto
Scientific Chairman
Editorial Board
Bali Medical Journal

Editor-in-Chief
Prof. Dr. dr. Sri Maliawan, SpBS (K)
(Scopus ID), (Google scholar)
srimaliawan@unud.ac.id / maliawans@yahoo.com
Department of Neuro Surgery, Udayana University
Sanglah General Hospital
Bali - Indonesia

Associate Editor
Prof. Dr. Ir. Ida Bagus Putra Manuaba, M.Phil
(Scopus ID), (Google Scholar)
putramanuaba@unud.ac.id / putramanuaba28@yahoo.com
Biomedicine Postgraduate Program, Udayana University
Bali - Indonesia

Prof. DR. dr. Ketut Suwiyoga, SpOG (K)
(Scopus ID)
suwiyoga@unud.ac.id
Faculty of Medicine, Udayana University, Sanglah Hospital Denpasar, Bali-Indonesia

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(Scopus ID)
jsvigos@iprimus.com.au
Ashford Hospital & Faculty of Health Sciences, University of Adelaide, Australia
ABSTRACT

**Dr Deasy Ayuningtyas Tandio MPH-MBA.**
(orcidID)
deasytandio@yahoo.com
James Cook University Australia Master of Public Health Master Of Business Administration, Indonesia

**Editorial Board for Regional Europa**
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(Scopus ID)
h.j.hoekstra@wxs.nl
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(Scopus ID)
qhuang@cqu.edu.cn
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(Scopus ID)
kheechee.soo@duke-nus.edu.sg
SGH (Singapore General Hospital), National University Hospital, Duke Medical Center Singapore

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(Scopus ID)
saisailesh.kumar@gmail.com
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(Scopus ID)
aminbahrami1359@gmail.com
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(Scopus ID)
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(Scopus ID), (Google Scholar)
undee@med.unhas.ac.id
Faculty of Medicine Hasanudin University, Makasar-Indonesia

Prof. Dr. dr. Abdul Hafid Bajamal, Sp.BS(K)
(Scopus ID)
hfbajamal@gmail.com
Faculty of Medicine Airlangga University, Surabaya-Indonesia

DR. Dr. I Wayan Sudarsa, Sp.B(K) Onk, FINACS, FICS.
(Scopus ID), (Google Scholar), (Researchgate)
sudarsa@unud.ac.id
Department of Surgery, Udayana University,
Sanglah General Hospital
Bali - Indonesia

(Scopus ID), (Google Scholar), (Orcid), (Researcher ID) (Researchgate)
AmerthaManuaba@gmail.com / Amertha_Manuaba@unud.ac.id
Biomedicine Magister Program, Udayana University, Indonesia

(Scopus ID), (Google Scholar), (Orcid ID), (Researcher ID), (Researchgate)
Lecturer of Clinical Pathology Department, Faculty of Medicine Udayana University, Indonesia.

dr. Agha Bhargah, SKed.
(Scopus ID), (Google Scholar), (Orcid ID), (Researchgate), (Researcher)
Faculty of Medicine Udayana University, Indonesia.

Editorial inquiries to be addressed to: editor@balimedicaljournal.org
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Soerarso Memorial Lecture: “Challenge of global competence of Indonesian surgeon”

Ignatius Riwanto
Department of Surgery, Faculty of Medicine, Universitas Diponegoro, Semarang, Indonesia

The mission of Indonesian College of Surgery is to educate the trainee of General Surgery to become global competence surgeon which able to fulfil the community need concerning comprehensive surgical care. Global competence surgeons mean that they have the ability to adapt with global environment, they able do surgical care everywhere in the world. The question is “whether this mission is achieved already?”. Up till now, program for International examination fellowship Royal College of Surgeon of Edinburg is not done yet, mean that global competence of Indonesian General Surgeon is still questioned. This problem is the responsibility of all stake holder of General Surgery Training: the Indonesian College of Surgery, the Surgical professional organization (PABI & IKABI) and the center of Surgical specialist training. We have work hard to hand to achieve global competence of Indonesian General Surgeon.

While we are dreaming and planning for having global competence of Indonesian General Surgeon, let evaluate the performance of General Surgeon on Surgical care recently. I personally noticed some problem in managing digestive surgery cases: anal sphincter injury, anal stricture after haemorrhoidectomy, miss diagnosis of rectal cancer on patients underwent haemorrhoidectomy, miss placement of the mesh on hernia surgery, injury of common hepatic duct during cholecystectomy, miss diagnosis of gastric perforation, incomplete abdominal toilet, and left of surgical gauze. What are the cause of those pitfall? I personally noticed that during training the number of cases in certain diseases are not enough yet, no/minimal evaluation of the operative skill (Direct Observe Practical Skill/ DOPS), the final national evaluation, done by Indonesian College of Surgery, is just cognitive aspect, surgical skill aspect is not evaluated yet. The curiosity of surgeon, as personal, to improve his/her surgical knowledge and skill need to be improved continuously. The monitoring of surgical competence by professional organization is not well prepared.

As trainer in Centre of Surgical Training, we have to improve the our dedication to educate the trainee to achieve global competence. The late of Dr. Soerarso dedication, my become inspiration in doing of our task. The Indonesian College of Surgery should prepare surgical skill evaluation, and should re-arrange the previous plan for international examination. Professional organization (PABI & IKABI) should design method of monitoring of surgical skill of General Surgeon to identify the surgical error and take action. Continuing professional education based on identified surgical error may minimize the next surgical error. Centre for Surgical Training may provide additional skill training for the alumni for the certain aspect of surgery. Coordination between Alumni organization, Centre of Surgical Training and Professional organization in the effort to improve the knowledge and performance of the General Surgeon is needed.

Keywords: Indonesian College of Surgery, Soerarso, Direct Observe Practical skill

General Surgery Training Program in Indonesia

Ida Bagus Tjakra Wirawaha Manuaba
Department of General Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia

A general surgery training program has been through many evolutions, starting with general surgery as the only training program for surgeons in Indonesia, with different interests in surgical specialisms, until the broken down and branching out of the training into other specialism. From a non-structured and semi-structured and fully-structured training either conducted by Professional Organization and lately university-based training program.

What result we saw was surgeons who were not professionally confident, not sure of their competencies, and were not comfortable working as a general surgeon in the community. This would cause slowing down or stagnant their skill development and preventing them from being good surgeons and general surgery leaders. Consequently, the general surgery population would continually diminish, and it would become critical to the service of General Surgery in the country. The only answer to the critical situation for the development of better and more competent general surgeons.

General Surgeon University-based training (in my personal opinion) was not appropriate, bureaucratic, and created many controversies. Since surgical training was focusing more on “skill and psychomotor competencies” than academic sciences, so the training of General Surgery should be under the Collegium of Professional Organization, and conducted in appointed and accredited academic hospitals, which was not necessarily University Hospital.

What “General Surgery Training Program” need, is better accredited teaching hospital not necessarily university hospital, instructors who feel themselves as general surgeons and feeling responsible for the continuity the good quality services in General Surgery. The era of “blaming” each other mistakes in providing General Surgical Services have to stop, because this is a reciprocal situation, now is the time for supporting each other for the better of General Surgery Training Program for the community.

Keywords: General Surgery, Training Program, Indonesia.

Disaster management in Palu, Central Sulawesi, Indonesia

Ahmad Zumaro
Indonesian Army Central Hospital, Jakarta, Indonesia

Background: The natural disaster that occurred in Palu on September 28, 2018 consisted of three types; an earthquake, tsunami and liquefaction. These...
caused damage to supporting infrastructures and thousands of people died and injured. These experiences may improve preparation and preparedness of the community, national and local government authorities with disaster mitigation. **Method:** Disaster in Palu as a case study. We attended and gave them medical serves as Army Emergency Medical Team (EMT) at the first time after disaster, less than 24 hours. We supported and looked at step by step how the local government authorities were managed these problems from the first time. **Results:** Palu City is one of the provincial capitals in Indonesia which is right on the equator line. The city has a considerable potential for natural disasters. The large number of damages and fatalities illustrated that the preparation and preparedness of community were still low. These conditions were caused by lack of knowledge and concern for these natural phenomena and their consequences. Disaster mitigation must be implemented to reduce the risk of natural disasters. Public policy about community preparedness towards disaster management is very important and urgent to do in order to reduce disaster risk. However the “medical cluster” that they had formed was very useful for taking on medical problems after disaster. **Conclusion:** Disaster in Palu City as a case study was considered relevant for the implementation of disaster management system. **Keywords:** Disaster, Management, Palu, Central Sulawesi.

### Role of Celecoxib in Rapid Pain Relief: Know Acute Pain

**Agus Nurtadwiyana**  
Gastroenterologist Surgeon, Santosa Hospital Bandung Central, Bandung, West Java, Indonesia

Better understanding of pain mechanisms has encouraged the development of new paradigms of pain management based on pre-emptive and multimodal strategies. COX-2 selective inhibitors were originally developed as chronic pain medication, their role has expanded to include post-surgical and acute medical pain.

If acute pain is not treated effectively, it will cause patient suffer from some or extreme pain or discomfort, disability, loss of productivity and impair quality of life which in turn would cause significant and long-term economic consequences. Insufficiently treated acute pain can develop into chronic pain. NSAIDs have well recognized adverse effects that contraindicate their use in the immediate pre- or perioperative setting, in particular, their effects on platelet aggregation. Other specific concerns include wound hematomas and a possible increase in gastric ulcer which is exaggerated by stress associated with surgery.

The COX-2 selective inhibitors are safe and effective in the pre- and perioperative settings and improve outcomes in postsurgical pain. Therefore, COX-2 selective inhibitors are widely used for the treatment of mild to severe acute pain which are adopted in many pain management guidelines.  
**Keywords:** Celecoxib, Rapid Pain, Acute Pain, Relief

### Indication of colostomy in adults with gastrointestinal problems

**Agus Ujianto**  
Department of surgery, Islamic Hospital, Banjarnegara, Central Java, Indonesia

The colostomy is the most commonly performed diversion of the faecal stream in the surgical management of colorectal carcinoma, diverticular disease, congenital birth defects, and trauma. The evolution of the colostomy has resulted in improved surgical techniques and a better quality of life for the patient. The clinician should be familiar with the indications for colostomy surgery, the different types of colostomies, preoperative and postoperative care, complications related to colostomy, and special diagnostic procedures required for follow-up care. There are many different technique and indication in adults patients.

**Keywords:** Colostomy, Indication, Gastrointestinal Problems.

### Update in Urology Emergency

**Ardy Santosa**  
Urology Surgeon, Dr. Kariadi General Hospital, Semarang, Indonesia

The development of technology in this century is increasingly fast and affects the automotive industry. Some are manufactured with more speed and more sophisticated. This phenomena also impacts in the medical science. Along with the increasing of traffic accidents, the incidence of urogenital tract trauma also increase. Understanding the symptoms and their treatment will greatly help save the life of urogenital tract trauma patients. This topic will be discussed further about the update in urology emergency.

**Keywords:** Update, Urology, Emergency

### Management of delayed presentation of low level congenital anorectal malformation

**Daniel Ardian Soeselo**  
Department of surgery, school of medicine and health sciences, ATMA JAYA Catholic University, Jakarta, Indonesia

**Background:** low level congenital anorectal malformation uncommon case and often miss-diagnosed. Diagnosis can be late due to late presentation of complaint. Physical examination remains the first step to diagnose this anomaly. Early surgery improved quality of life

**Case Description:** A 11 months-infants boy was diagnosed as delayed presentation of low level congenital anorectal malformation. The recent management by cut-back anoplasty of delayed presentation of low level congenital anorectal malformation was conducted in this patient.

**Conclusion:** Low level congenital anorectal malformation often miss-diagnosed during birth. Thus, making patient come with serious complaint later.

**Keywords:** Congenital Anorectal Malformation, Low Level Anorectal Malformation, Cut Back Anoplasty
Electrical burn: case report

Dicky Arianto
General Surgeon, Semarang Medical Center Telegorejo, Semarang, Indonesia

Case Description: Male, 24 years old, got severe burn injuries caused by high voltage electric current on left temporal scalp (full-thickness, 1%), left shoulder (full-thickness, 1%), left lower leg – foot (full-thickness, 6%) accompanied with compartment syndrome. He had good general systemic condition, electrocardiogram, and blood examination. We performed fluid resuscitation by modified Parkland formula, fasciotomy on his left leg and foot, debridement on all burn wounds, and continued fluid management according to the urine production. After ensured no infection sign on scalp & shoulder, then in day-3 we performed rotation flap for the scalp, and V-Y flap for the shoulder. We performed skin graft for the lower leg & foot after 4 weeks wound care.

Conclusion: High-voltage current can cause internal organ injury and extensive local burns, with loss of full-thickness skin, digits or even the entire extremity. It need comprehensive management for life and limbs saving.

Keywords: Electrical Injury, Burn, Flap, Graft.

Emergency response in disaster management

Donal Aronggear
General Surgeon, Jayapura Hospital, Jayapura, Indonesia

In accordance with Law No.24 of 2007 concerning Disaster Management, which follows several related regulations. To support the development of disaster management that includes central and regional governments, disaster management in a non-disaster situation (pre-disaster) and in a disaster situation (during an emergency response), also post-disaster, disaster management is very important and it should be built at the start of a disaster. So that, with good handling it will have an impact on reducing disaster victims. Geographical factors and human resources which categorized as medical and non-logistical medical assistants in handling disaster management in Indonesia. Therefore, PABI as a professional surgeon organization in Indonesia has a contribution to assist in disaster management (emergency response) by forming the PABI Task Force to participate in the implementation of disaster management.

Keywords: Disaster Management, Emergency Response

Comprehensive management of traumatic vascular injury

Donie Firdhianto
SMC Telogorejo Hospital Semarang, Central Java, Indonesia

Trauma represents a leading cause of morbidity and mortality around the world. Although vascular injuries are present in only 1% to 2% of injured patients, these patients account for a far greater share of morbidity, mortality, and resource utilization than those without such injuries.

The efficient diagnosis and rapid localization of vascular injuries are of great importance in the evaluation of a trauma patient. In cases in which a patient presents with “hard signs” of vascular (primarily penetrating arterial) injury, the existence and location of the injury are generally obvious, and the next step in management is operative exploration and repair. The diagnosis of injuries in patients presenting with only “soft signs” of vascular injury is more challenging, and such patients typically require specific diagnostic testing in addition to the secondary trauma survey.

Arguably the most significant development in modern vascular surgery is the emergence of endovascular techniques for managing vascular disease, and these techniques are now being extended to traumatic injuries. Although initially applied to injuries for which open repair was highly morbid (thoracic aorta) or provided limited exposure (distal carotid, subclavian artery), endovascular techniques for temporizing acute control of haemorrhage, or as definitive management, can be applied to arterial and venous injury patterns, this was associated with a decrease in morbidity, hospital stay, and mortality. For severely injured patients, damage control techniques, including abbreviated surgery, the application of endovascular techniques, balanced resuscitation, and temporary intravascular shunts (both arterial and venous) have been associated with major reductions in both mortality and limb loss.

Keywords: Comprehensive Management, Vascular Injury, Traumatic.
Update in the management of burn injury: focusing on high voltage electric injury

I Nyoman Putu Riasa
Burn and Reconstructive Microsurgery Unit, Sanglah General Hospital, Denpasar, Bali, Indonesia

High voltage electric injury is commonly found in Indonesia due to direct contact with high voltage electric line. The injury mostly involving male which is occur while repairing power line by the electrician; construction worker when working on the roof and when fixing the telecommunication tower. The victim also accompanied by other injury due to falling down from the roof. The aims of this presentation is to discuss the management of this injury including the resuscitation phase, the role of fasciometry and the reconstructive efforts that is performed in our unit. Review of 236 cases from 2002-2014 is done, and selected number of patients are presented as case studies according to the need of fasciometry and the reconstructive procedures. The short term results of mortality and amputation rate and long-term results of functional assessment is presented following the case presentations. Two patients (0.8%) were died from sepsis and acute kidney injury. There were 30 patients (12.7%) had emergency fasciometry. Improvement of the results in the management of high voltage electric injury could be achieve with proper resuscitation, adequate fasciometry and early reconstructive procedures.

Keywords: Burn Injury, Update Management, Electric Injury

Surgery for well differentiated thyroid cancer

Ferdi Wiweko Ardianto
Hermina Hospital, Purwokerto, Banyumas, Central Java, Indonesia

Thyroid cancer is the most common endocrine malignancy, accounting for 3.8% of new cancer diagnoses, and its incidence has increased faster than other malignancies in the last decade due to the better detection of early-stage small cancers. Differentiated thyroid carcinoma is still diagnosed only after reviewing permanent histological sections in some patients, despite the improvements in preoperative fine-needle aspiration biopsy and intra-operative frozen section examination of the thyroid nodules. Most of these tumors are well differentiated and curable by surgery. Surgical resection remains the first-line therapy. Open thyroidectomy, performed through an anterior neck dissection, is the most commonly practiced surgery. Patients with low-risk, well-differentiated thyroid carcinomas have a relatively good prognosis with a mortality rate of about 2-5% and a recurrence rate of about 20%.

Keywords: Thyroid Cancer, Well differentiated, Open Thyroidectomy, Prognosis

Reclassification and Ina-CBG in Universal Health Coverage System: the role of surgeons

Fransiscus Arifin
Gastroenterologist Surgeon, Soewandhi General Hospital, Surabaya, Indonesia

Indonesia had tried to implement the Universal Health Coverage System for more than 5 years. One of the most prominent component is the National Health Insurance (JKN), more commonly recognized by the name of the managing body, Badan Penyelenggara Jaminan Sosial (BPJS). This system is mandated by the National Social Insurance System Law (SJSN), but the implementation still posed many challenges over the year.

Surgeons are a part of the health service system which provides one of the most unit cost intensive health service, that is surgery. Considering the volume of cases which needs surgical interventions, in the national level this can amount to significant number. Since surgery inherently had many variations of difficulties and cases, the assignment of costing are not simple. There are many ways that surgical cost can be grouped and classified and the provide the grouping data for the basis of DRG and its reimbursement, which will be discussed. However, any system of classification (and reclassification) can only performed as well as the inputs (“garbage in, garbage out principle”). This is the role of individual surgeons and surgeon organization to maintain the quality of data, in part for the purpose of scientific inquiries, but also for the representative costing of surgical procedures.

Keywords: Reclassification, Ina-CBG, Universal Health Coverage

Management of Urethral Injury

Hadiyana Suryadi
Head of PABI Bandung

Background: Urethral Injury can be caused by blunt trauma (perineal straddle injury), pelvic fracture, penetrating trauma at perineum (impalement injury), post extraction urethral stone from mid shaft urethra, and iatrogenic (post foley catheter insertion/ bougienage/ endoscopy). This case study aims to report the current management of urethral injury.

Case Description: A 45 years old Male brought to the ER after he got into traffic accident. 2 hours before admission, the patient was riding his motorcycle, but suddenly he slipped and fell from his motorcycle and run over by a car behind him at pelvic area. After the accident the patient complained of pain at pelvic area, unable to urinate and there also meatal bleeding. The patient was diagnosed with urine retention due to urethral ruptured caused by pelvic fracture. The patient then underwent surgery to repair the uretha injury by insertion of silicone catheter using “Rail Roading Method”. The silicone catheter was maintained for 3 weeks and continued with periodic bougienage.

Conclusion: The insertion of silicone catheter using Rail Roading Method as the recent management of urethral injury to the patient provided a good clinical outcome to the patient.

Keywords: Urethral Injury, Pelvic Fracture, Silicone Catheter, Rail Roading Method, Bougienage

Current surgical education and training in Indonesia

Ibrahim Labeda
President College of Surgeons of Indonesia

Surgical education has undergone rapid changes since the enactment of Law provision 29 of 2004 concerning medical practice. Changes in the structure and the specialist education system that running quickly, causing high demand to the government through the Indonesian Medical Council (KKI) for issuing a policy that can be used as a standard in the implementation of medical education programs including surgeons.
The College of Surgeons of Indonesia (KIBI) established competency standards for surgeons and surgical education in Indonesia, compiles a national surgical education curriculum, carried out regulations regarding the application of evaluation, conducted evaluations, fostered and encouraged education centers to advance and develop the implementation of surgical education programs in Indonesia.

The government through the Regulation of the Minister of Education and Culture of the Republic of Indonesia provision 49 of 2014 and provision 3 of 2020 about the National Higher Education Standards which determines that the education period for specialists is 4 years at maximum. In response to this change, KIBI has compiled a new competency-based curriculum that capable of carrying out attitudes and behaviors in the cognitive, psychomotor and affective domains which have been ratified by KKI as a professional education standard for Indonesian surgical specialists with provision 73 of 2020.

As an organization that builds a specialist surgeon education evaluation system in Indonesia, KIBI guarantees the improvement of the quality of education and adequacy that each individual graduate of surgical specialist education compelled to achieve. As a surgeon with intellectual character, it is expected that graduates will be able to carry out proficient surgical practices in accordance with global standards and be able to handle the community in providing comprehensive surgical services.

**Keywords:** Surgical Education, Training, Indonesia

**Modified technique on haemorrhoids ligation: surgeon experience in Lampung**

**Paran Bagionoto**
Mardi Waluyo Hospital, Metro, Lampung.

Haemorrhoids are defined as the symptomatic enlargement and distal displacement of the normal anal cushions; and a very common anorectal condition: prevalence rate of 4.4%. In most instances, haemorrhoids are treated conservatively (diet, lifestyle, and medication). Non-operative approaches include Sclerotherapy, Infrared Coagulation; preferably, Rubber Band Ligation. Several surgical methods for treating haemorrhoids have been introduced, including Haemorrhoidectomy, Stapled Haemorrhoidopexy, Doppler-Guided Haemorrhoid Artery Ligation.

Rubber band ligation is the most effective options, simple, safe method to treating first, second, and third-degree haemorrhoids non-operatively. The problems rubber band ligation alone is post-pain treatment, haemorrhage past treatment, and recurrence. Modified technique on Haemorrhoid ligation with combined sclerotherapy and rubber band ligation to achieve the purpose of treating bleeding and prolapse symptoms at the same time. As we know sclerotic agent injection can make various sclerosis; effectively treatment of bleeding symptom. The rubber band ligation makes the internal haemorrhoids ischemia atrophy and the wound tightened. The anal cushion moved effectively, which achieves the purpose of treating prolapsed symptoms.

**Keywords:** Modified Technique, Haemorrhoids Ligation, Surgeon Experience

**Gunshot wounds: surgeon’s experience**

**Ratna Astri Andhini**
1General Surgeon Division of Bhayangkara 3rd Level Hospital Riau Regional Police Force
2General Surgeon Division of Prima Hospital, Pekanbaru, Indonesia

The number of deaths caused by gunshot wounds increases annually. It is also linked to increased ownership and crime by the use of firearms. The organ that is frequently treated for gunshot wounds is the lower extremities, abdomen, upper extremities, the chest, head and neck. Over the course of one year, the author herself treated approximately 7 patients who had gunshot wounds. About 5 patients suffered gunshot wounds in the abdominal area, where 4 patients performed laparotomy and 1 patient performed non-operative actions. Massive blood loss, extensive organ injuries and infections are the causes of death in patients with gunshot wounds. As a surgeon, it is of particular concern in dealing with patient. The success of case handling and management does not rely solely on a surgeon. Experience in handling cases, readiness of hospitals as referral places, adequate equipment, health insurance, socioeconomic and family support of patients themselves also influence in the successful treatment of patients.

**Keywords:** Gunshot, Wound, Management, Experience

**Acute scrotal swelling: current diagnosis and therapy**

**Syahar Banu**
Surgery Division, R.A Kartini Hospital, Jepara, Indonesia

Acute scrotal swelling is defined as “the acute onset of pain and swelling of the scrotum that requires either emergency surgical intervention or specific medical therapy”. Acute scrotal swellings are the commonest swellings that affect both children and adults. The evaluation of acute scrotal pain can be challenging for the clinician initially examining and triaging the patient. The differential diagnosis includes torsion of the testis or one of the testicular appendages, epididymo-orchitis, trauma, scrotal abscess, Fournier’s gangrene and strangulated hernia. Imaging studies, such as radionuclide scanning and colour Doppler ultrasonography, are helpful in equivocal cases. The primary objective of management of acute scrotum is to avoid testicular loss. The likelihood of testicular salvage in torsion depends on the interval between onset of pain and surgical intervention. Surgical exploration undertaken without delay maximizes the chance of testicular salvage.

**Keywords:** Acute Scrotum, Diagnosis, Therapy
Deceleration injury of liver with omental flap and multiple rib fracture: a case report

Vito Mahendra Ekasaputra1 2

1 Trainee of Digestive Surgery, dr. Kariadi Hospital, Medical Faculty of Diponegoro University, Semarang, Indonesia.
2 Department of Surgery, Sultan Agung Islamic Hospital – Medical Faculty of Sultan Agung Islamic University, Semarang, Indonesia

Background: The liver is the most common solid viscera injured in motor vehicle accidents. Blunt trauma of the liver is an important cause of morbidity and mortality in the trauma setting. In today’s trauma setting with advances in radiological diagnostic techniques and intervention, most cases can be managed by conservative non-operative management. However, some cases might require surgical damage control and repair if there is haemodynamic instability. This case study aims to evaluate the deceleration injury of liver with omental flap and multiple rib fracture.

Case Presentation: Female 24 years old came to ER with unstable haemodynamic caused by motor vehicle collision with truck from her right side. Clinical examination revealed a bruise on right hemithorax and upper right quadrant of abdomen, with tenderness on palpation and decreased of consciousness, with blood pressure 99/55 mmHg, and pulse rate 124 times/minute, respiration rate 24 times/minutes, and Glasgow coma scale : 13. Haemoglobin was 8.2 g/dl, haematocrit 25.2%. From Focused Assessment sonography for trauma (FAST) revealed free fluid in intraabdominal space within Morrison pouch, splenorenal and perivesical space, suspected rupture of abdominal solid organ with continuous bleeding no response with resuscitation. We performed surgical resuscitation immediately, and found 4th grade of AAST liver injury, with parenchymal laceration on 2, 3, and 4b segment with massive bleeding. 5th and 6th anterior rib fracture, and 2nd AAST grade of sigmoid laceration. We decided to performed natural hemostasis technique with pedicled omental flap with deep mattress suture.

Conclusion: Pedicled omental flap in blunt hepatic trauma can be used irrespective of the grade of liver injury. It should be used in combination with other procedures like debridement, segmental or unsegmental resection, control of active bleeding vessels, use of Pringles manoeuvre, selective hepatic artery ligation and even with deep mattress suturing.

Keywords: Liver trauma, Unstable Haemodynamic, Omental Flap

Management of mediastinal injury

Wahyu Wirvawan
Staff of Cardiothoracic and Vascular Surgery, Department Medical Faculty of Diponegoro University, dr. Kariadi General Hospital, Semarang, Indonesia.

The mediastinum is contained high concentration of visceral structure and major vascular. Traumatic injury to the mediastinum can be immediately life-threatening. All Thoracic injuries, due to both penetrating and blunt trauma account for 20–25% of traumatic deaths. Unstable patients are hard to diagnostic and operative challenge to the surgeon, require damage control resuscitation and immediate surgery. This study aims to discuss about the evaluation and management of the traumatic mediastinal injury. All patients with mediastinal injury should be treated lead to Advanced Trauma Life Support (ATLS) principles. Unstable patients management begins with the restrictive fluid management.

How to prevent the recurrent laryngeal nerve injury in thyroid surgery

Yan Wisnu Prajoko
Surgical Oncology Staff, Faculty of Medicine, Diponegoro University, Kariadi Hospital Semarang, Indonesia.

Thyroidectomy is an operation that involves surgical removal of all or part of the thyroid gland. The main postoperative complication of thyroidectomy are hypoparathyroidism and recurrent laryngeal nerve injury. Risk factors for nerve palsy should be considered. Deep knowledge of the surgical anatomy of the nerve is required to protect it from injury. Anatomical landmarks and surgical techniques that are helpful for investigation and identification of the RLN are very important. Exploration, visual identification and anatomical dissection of the nerve constitute the gold standard technique to prevent its injury.

Keywords: Recurrent, Laryngeal Nerve Injury, Thyroid Surgery

Multimodal analgesia for postoperative pain management based on mechanism to treatment

Andi Husni Tanra
Department of Anesthesiology, Intensive Care and Pain Management, Faculty of Medicine, Hasanuddin University, Makassar, Indonesia

Background: The management of postoperative pain has shifted from opioid based administration to multimodal analgesia, which uses a combination of two or more analgesics that act differently and produce additive or synergistic analgesic effect. Multimodal analgesia has demonstrated benefit in patient outcome following a surgery procedure. Multimodal analgesia allows for less opioid needed to achieve acceptable pain scores, thereby reducing opioid-related adverse events. However, postoperative pain management still continues to be suboptimal; there are several reasons including lack of translation of basic mechanisms of postoperative pain into clinical practice. This study aims to review and discusses the use of basic mechanisms to treat postoperative pain using multimodal analgesia.

Methods: The review lies in treatment recommendations of multimodal...
analgesia, where Non-Steroid Anti-Inflammatory Drugs (NSAIDs) especially ibuprofen as an essential component.  

**Results:** Using basic mechanisms to treat postoperative pain where ibuprofen is a part of multimodal analgesia has shown good results in reducing opioid consumption, improving pain management, and enhance recovery. Understanding basic mechanism to treat postoperative pain may improve patients' outcome after surgery.  

**Conclusion:** Ibuprofen has favorable safety profile and less opioid needs; thereby reduces opioid-related adverse event and suitable for outpatient. It’s important to realize that postoperative pain management is not only a humanitarian task but that treatment of acute postoperative pain has the potential to reduce morbidity, even mortality after surgery and in parallel enhance recovery, improve rehabilitation, reduce hospital stay and thereby overall hospital cost.  

**Keywords:** Postoperative pain, multimodal analgesia, NSAIDs, ibuprofen, opioid  

### Surgery indication of hemorrhoid  

**Muryanto**  
General Surgeon, Batang General Hospital, Central Java, Indonesia  

Hemorrhoids are clusters of vascular tissues, smooth muscles and connective tissues that lie along the anal canal in three columns, left lateral, right anterior and right posterior positions. In many cases, hemorrhoids can be treated effectively with diet, good hygiene, and topical medications. In some cases, though diet and drugs are not enough, people who do not respond to nonsurgical treatment might surgery should be considered to symptomatic grade III, grade IV, or mixed internal and external hemorrhoids, strangulated internal hemorrhoids and some thrombosed external hemorrhoids. Open or closed (conventional) excisional. Hemorrhoidectomy leads to greater surgical success rates but also incurs more pain and prolonged recovery than office-based procedures.  

**Keywords:** Hemorrhoids, Management, Surgery, Hemorrhoidectomy  

### The ethical concern in surgery  

**Peter Johannes Manoppo**  
General Surgeon, Bioethicist, Surabaya, Indonesia  

Ethically appropriate surgery is the destiny of performing surgeons. Therefore, the surgeon should be prudent in preparing the patient before the surgery with the good procedures and mutual communication with the surgical team and the patient, doing the surgery properly and proceed to post-operative care securely. In all part of these procedures should be done on the good ethical ground. Some issues could be challenging in surgery, like severe cases, multiple trauma, surgical complications, bad prognosis, scarcity of human resources or equipment. Those situations would inflict some ethical concerns, during pre-operative preparation, surgical intervention and post-operative care, among others: autonomy, informed-consent, beneficence, non-maleficence, justice, vulnerability, dignity, confidentiality.  

**Keywords:** Ethically Appropriate Surgery, Ethical Ground, Surgical Intervention  

### Indication of Thyroidectomy in Thyroid Diseases  

**Yose Renaldi**  
General Surgeon, Indriati Sukoharjo General Hospital, Sukoharjo, Central Java, Indonesia  

The presence of a single or multiple nodule(s) in an otherwise apparently normal thyroid gland is termed nodular thyroid disease. Even though most thyroid nodules are benign, both physicians and patients are concerned about cancer. According to epidemiologic studies in North America, the prevalence of a palpable thyroid nodule is 4-7%, with new nodules developing at a rate of 0.1% per year. Thyroid nodules are more common in women than in men. They are also more common in older persons, people who live in endemic areas of iodine deficiency, and people with previous exposure to ionizing radiation. Infants and children who received 200-500 cGy of ionizing radiation develop new nodules at a rate of 2% per year, reaching a peak incidence in 15-25 years. The initial evaluation of a thyroid nodule is no different from that for any other disease. No diagnostic test can replace the history and physical examination. The history should determine whether there has been prior external irradiation of the head and neck area, as these patients have a 40% chance of harboring a malignancy in a palpable thyroid nodule. The possibility of malignancy increases if a thyroid nodule has grown rapidly or caused symptoms of local compression (i.e., difficulty speaking, breathing, or swallowing).  

**Keywords:** Single Nodule, Multiple Nodule(s), Ages, Sex, Radiation  

### Laparoscopy Appendectomy in M. Ashari Regional Public Hospital Pemalang  

**Arga Putra Pradana**  
Department of Surgery, M. Ashari Regional Public Hospital, Pemalang, Indonesia  

**Background:** Acute appendicitis is one of the causes of acute abdomen which requires surgery. There are various ways of managing acute appendicitis. Appendectomy can be performed laparoscopically and openly. Laparoscopic Appendectomy has various advantages and disadvantages compared to open appendectomy. In its development, it is hoped that Laparoscopic Appendectomy will be the main choice of surgeons in Indonesia in the management of acute appendicitis.  

**Case Description:** a 15-year-old woman, diagnosed with acute appendicitis, with complaints of fever, nausea, a history of migratory pain, lower right abdominal pain, leukocytosis of 14,000 / mm3, with an Alvarado score of 9, underwent an abdominal ultrasonography examination with a suspected acute appendicitis result.  

**Conclusion:** Laparoscopic Appendectomy has various advantages in terms of less postoperative pain, faster mobilization, faster hospitalization, lower risk of surgical wound infection, and is cosmetically better than open appendectomy.  

**Keywords:** Acute Appendicitis, Laparoscopy Appendectomy, Open Appendectomy
ABSTRACT

Management of cholelithiasis with laparoscopic cholecystectomy in RSUD Tidar, Magelang City

Welman Pramudya Nanta

Background: Stones in the gallbladder (cholelithiasis) usually develop insidiously and patients may remain asymptomatic for years. But symptomatic gall stones may appear with nausea, vomiting, pain at right upper quadrant of abdomen. This case study aims to evaluate the management of cholelithiasis with laparoscopic cholecystectomy in RSUD Tidar, Magelang City

Case Description: A female 47 years old came to the hospital with complaints of nausea and pain on right upper quadrant since a few days ago. The patient was evaluated with Ultrasonography (USG) and the diagnosis of cholelithiasis made by the clinical reasoning. The patient was underwent laparoscopic cholecystectomy procedure and hospitalized for 3 days (discharged 2 days post operation) with favourable outcome.

Conclusion: The laparoscopic cholecystectomy procedure could be used as the primary management instead of open surgery in the cholelithiasis cases.

Keywords: Cholelithiasis, Laparoscopic, Laparoscopic Cholecystectomy

Tips and tricks how to prevent biliary duct injuries

Erik Prabowo
Consultant Digestive Surgery, Department of Surgery, Universitas Diponegoro, Kariadi General Hospital, Semarang, Indonesia

Laparoscopic cholecystectomy is currently the most common abdominal surgical procedure performed by general surgeons in Indonesia. The incidence of bile duct injury in cholecystectomy laparotomy ranges from 0.1-0.5% 1. After emergence and progression of laparoscopic cholecystectomy by surgeons all over the world the incidence of bile duct injury increases to 3% 2. It should be noted that the development of medical technology must be accompanied by a good mastery of these new technique.

There have been many ways and efforts put forward to prevent injury to the bile duct since the development of the laparoscopic technique in the early 1990s. Efforts have been made to include determining the correct timing of surgery 3 and establishing training standards 4. The biliary duct injury rate decreased after the introduction of the “critical view of safety” technique by Strasberg in 1995. However, it was almost a decade later that this technique became well-accepted and became widespread throughout the world. Broadly speaking this technique requires a clear evaluation of the common hepatic duct, cystic duct and cystic artery prior to making cuts to each structure, thereby reducing the risk of common bile duct injury. Apart from the technique from Strasberg, one popular technique is the use of intraoperative cholangiography 6. In most laparoscopic cholecystectomy procedures, the “critical view of safety” technique is sufficient, but sometimes cholangiography is needed to get maximum results in preventing bile duct injury and surgeons should use it liberally.

Strictly using the laparoscopic cholecystectomy technique based on the technique from Strasberg can significantly reduce the risk of iatrogenic bile duct injury, besides that many sophisticated techniques are developed and some are quite expensive, all of which can be utilized as long as each hospital supports the availability of these tools and techniques.

Keywords: Tips, Tricks, Prevent, Biliary Duct Injuries

Lawsuits against the surgeon

H. Nazrial Nazar
Chairman of the Legal Bureau for Member Development and Defense (BHP2A)

Patients filed lawsuits against surgeons due to several triggering factors, such as ineffective communication between patient doctors. At the same time, we know communication is one of the important things to cure patients. Other things that can trigger lawsuits against surgeons are the negligence of doctors in providing informed consent, lack of professionalism and empathy to create good interpersonal relationships between doctors and patients, and comments from other colleagues. The causes of the patient’s demands were functional disorders, recurrence, complications, and malformations resulting from the defendant’s doctor’s actions.

Not a few patients have sued doctors, especially in the surgery department, with the distribution of cases in cases of orthopedics, general surgery, plastic surgery, oncology, urology, and neurosurgery. In addition, lawsuits are also often found in cases in obstetrics, gynecology and anesthesia. The root of the problem that causes a patient to sue a surgeon is that every surgical procedure has risks and potential medical accidents that can be caused by medical accidents and medical errors such as carelessness and negligence of doctors as well as complications that may arise in the future.

The solution that doctors can take is to prioritize mediation and strategies with the institution’s active role in protecting doctors as health caregivers and maintaining the hospital’s good name, as stated in the related UURS. The hospital medical committee plays an important role in the settlement process in the event of a lawsuit against doctors by mediating in medical audit sessions which will be resolved in terms of ethics by MKEK / BHP2A at the regional IDI branch and related to discipline by the Advocacy Division at the association. The next decision will be forwarded by MKEK / BHP2A at IDI Centre.

Matters that can aggravate or reduce demands are the Practice License (SIP), doctors’ competence, the referral system, and the protection of professional medical insurance. That every doctor is obliged to provide medical services according to professional standards, medical services and operational procedures. In addition, doctors can refer patients to other doctors if they cannot carry out examinations and therapy on these patients to doctors who are more skilled based on Law Number 29 of 2004 Article 51 concerning medical practice.

Keywords: Lawsuits, Surgeon, Ethics, IDI, Practic License
Correlation between physiology of hemostasis parameter and lactate serum content as mortality indicator of multiple trauma patient in Sanglah Hospital, Bali

Hizkia Robinson Junsen Lumban Gaol, I Ketut Wiargitha, I Gede Raka Widiana
General Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia

Background: Trauma is now the most frequent cause of death in the first four decades of life and is still a major public health problem in every country. Trauma that occurs often involves several regions of the body. This condition is called multiple trauma. In multiple trauma, coagulopathy often occurs. In the last four decades it was mentioned that in multiple trauma conditions also occur acidosis and coagulopathy which will also increase the mortality of multiple trauma patients with multiple trauma, serum lactate is superior to base deficit. The purpose of this study is to obtain the correlation of each prothrombin time (PT) value, activated partial prothrombin time (aPTT) value and international normalized ratio (INR) value with serum lactate levels as indicators of mortality in multiple trauma cases.

Methods: This study was an observational study with an analytic cross-sectional design to determine the correlation between physiological parameters of hemostasis and serum lactate in multiple trauma patients.

Results: From the 60 samples studied there were 43 male patients (71.7%) and 17 female patients (28.3%) with an average age of 37 ± 19.61 years. 7 (11.7%) cases died. Logistic regression test with each conducted on the APPT and INR variables and lactate levels obtained aPTT was the most influential risk factor for mortality with a p-value of 0.005 <0.05 OR 0.023 (CI 95%: 0.002-0.332)

Conclusion: Serum lactate levels and physiological hemostasis are not only indicators that explain a patient in a state of shock, but can also be used as an indicator in determining morbidity and mortality in multiple trauma patients.

Keywords: Multiple Trauma, Serum Lactate, Physiological Hemostasis, Morbidity, Mortality.

The effect of giving ethanol extract of African leaves (Vernonia amygdalina) on wound closure and PMN cell infiltration in Wistar rats with Streptozotocin induced diabetes

Subagjo, Artono Isharanto, Andreas Nicolaus Ola
General Surgery, Faculty of Medicine, Universitas Brawijaya, Malang, Indonesia

Background: This study aims to prove the role of the ethanol extract of African leaves (Vernonia amygdalina) in improving wound healing in streptozotocin-induced diabetic ulcers in rats.

Methods: In this study four groups of rats were induced with diabetes using 55 mg/kgBW Streptozotocin (STZ) intraperitoneally on the first day. All rats with serum glucose levels above 250 mg/dl were then excised on the back. For 16 days, 3 groups of rats were given African leaf extract (Vernonia amygdalina) at doses of 10, 30, and 90 mg/kgBW. One group was only given aquadest after excision and the other group was excised without STZ injection. On the 17th day surgery was performed; blood and skin tissue samples were taken for histopathological examination.

Results: The ethanol extract of African leaves (Vernonia amygdalina) has been shown to significantly reduce blood glucose levels positive control 480.5 mg/dl, negative control 166.75 mg/dl, extract dose 10 mg/kgBW 275 mg/dl, extract dose 30 mg/kgBW 285,75 mg/dl, extract dose 90 mg/kgBW 325,5 mg/dl, increase the speed of wound closure (p=0.000, p <0.05), reduce PMN cell infiltration (p=0.000, p <0.05), and reduce TNF-α level but statistically not significant (p = 0.075, p >0.05).

Conclusion: The administration of ethanol extract of African leaves (Vernonia amygdalina) has been shown to reduce blood glucose levels, increase the speed of wound closure, reduce PMN cell infiltration, and reduce TNF-α in Wistar rat with diabetic ulcers with the induction of Streptozotocin.

Keywords: Vernonia amygdalina, Diabetic Ulcer, Blood Glucose Level, Wound Closure Rate, PMN Cell Infiltration, Serum TNF-α

Relationship of interleukin-6 and TNF-α with the occurrence of MODS in trauma thoracoabdominal patients with ISS ≥ 16 in Dr. Saiful Anwar Hospital

Dimas Prasetyo, Istan Irman Syah Irsan
General Surgery, Faculty of Medicine, Universitas Brawijaya, Malang, Indonesia

Background: Multiple trauma management evaluates clinically and anatomically based on an Injury severity score, the placement of a cytokine as a predictor has not been widely found or used. This study was designed to determine the relationship of levels of interleukin-6 (IL-6) and TNF α as a marker of survival biology in cases of thoracoabdominal trauma.

Material and Methods: This study is an observational cohort study. The research subjects were thoracoabdominal trauma patients that matched the criteria. Interleukin-6, TNF α and ISS levels will be measured when the subject is in the Emergency Installation. Furthermore, the subject will be followed until the 5th day to determine survival status. To test the research hypothesis the Spearman Correlation test will be carried out, and the independent sample t-test. Inclusion criteria included Thoracoabdominal patients, Subject age between 16 years – 60 years. Injury Severity Score ≥ 16, Subjects coming less than 24 hours after trauma, Subjects having never undergone a major surgical procedure. Exclusion criteria include patients who have metabolic, autoimmune, or other chronic diseases

Result: On the test results it can be seen that the Spearman rank correlation coefficient value is positive between IL-6 and APACHE II score, which is 0.984. Positive direction means that when the Interleukin 6 (IL-6) variable increases, the APACHE II score variable will increase. The correlation of TNF α and APACHE II score also positive, which is 0.320. Positive direction means that when the TNF α variable increases, the APACHE II score variable will increase. Based on the results of the above test it can be seen that the p-value is smaller than alpha 5% (0.005 <0.05) so that H0 is rejected with the conclusion there is a relationship (correlation) between Interleukin 6 (IL-6) TNF α and the APACHE II Score.

Conclusion: Increased levels of Interleukin 6 (IL-6) and TNF α in thoracoabdominal trauma patients with ISS ≥ 16

Keywords: Interleukin-6, TNF-α, MODS Recurrence, ISS, Trauma Thoracoabdominal
**ABSTRACT**

Effectivity of moringa oleifera leave’s extract in healing process of partial thickness burn wound observed from exudation, polymorphonuclear cell count, and macrophage count study on Wistar mice that was given silver sulfadiazine 1% topically

Agnes Stella Valentina¹, Trilaksana Nugroho², Neni Susilaningsih³, Awal Prasetyo⁴, Noor Wijayahadi⁵, Najarullah⁶

¹Second Degree Student of Biomedic Science, General Surgery Resident of Medical Faculty, Universitas Diponegoro, dr. Kariadi General Hospital, Semarang, Indonesia
²Biomed Lecturer of Medical Faculty, Universitas Diponegoro, Semarang, Indonesia
³Department of General Surgery, Division of Plastic and Reconstructive Surgery, Universitas Diponegoro, Semarang, Indonesia

Background: Burn wound healing is still being problem, especially concerned with its complication. One modality type of burn wound therapy is with topical medicine with silver sulfadiazine as the first line therapy. Recently, research about herb topical medicine has growth. Moringa oleifera (MO) is a kind of herb plant that has antimicrobial and antiflammation effect, so it is tend to faster burn wound healing. This study aims to prove the effectivity of Moringa oleifera leave’s extract in increasing partial thickness burn wound healing response observed from exudation, polymorphonuclear (PMN) amount, and macrophage amount.

Methods: Research design that was used is “Randomized posttest with control group”. Study population used 24 male Wistar mice that was induced burn wound and randomly divided into 4 groups which given topically medicine once daily for 10 days. Treatment groups included: I (MO leave’s extract10%), II (SSD + MO leave’s extract 10%), III (SSD), dan IV (pure vehiculum). Exudation was assessed macroscopically, while PMN and macrophage amount were assessed microscopically with Hematoxylin-Eosin. Data was analyzed and processed using statistic test with SPSS 25.0

Results: Exudation in I, II, and III group has decreased significantly compared to IV group (p=0.031; 0.011; 0.031). Decrease of PMN amount significantly obtained in I group than IV group (p=0.028). Significant different also obtained in macrophage amount between II group and IV group (p=0.000). Exudation-PMN count and PMN-macrophage count in this research has a strong positive correlation.

Conclusion: Moringa oleifera leave’s extract proved to be effective in partial thickness burn wound healing observed from decrease of exudation, PMN, and macrophage amount.

Keywords: Moringa oleifera, Silver Sulfadiazine, Partial Thickness Burn Wound, Exudation, Polymorphonuclear, Macrophage

Impact of estrogen receptor, progesterone receptor, HER-2 and cancer subtypes (luminal A, luminal B, HER-2 positive and triple negative breast cancer) on pathological response in patients with locally advanced breast cancer after neoadjuvant chemotherapy A

Amal Fathullah Pua Upa¹, Herjuna Hardiyanto²

¹Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia
²Department of Surgery, Division of Oncology Surgery, Dr. Sardjito General Hospital, Indonesia

Background: Locally advanced breast cancer (LABC) covered 40-60% of all breast cancer cases when diagnosed in developing countries. Neoadjuvant chemotherapy (NAC) is a standard of care for LABC to achieve total tumor resection. Pathological response after NAC had been linked to survival improvement in patients. Biomarkers identification as predictors for this pathological response is necessary. Hormonal receptor status, increased HER-2 expression and molecular subtypes were analyzed as predictor factors to achieve pathological response in LABC after NAC administration.

Methods: This retrospective study was conducted from August 2019 until November 2019 in Dr Sardjito General Hospital, Yogyakarta. Tissue sample and immunohistochemistry (IHC) examination were collected from 27 patients of locally advanced breast cancer (LABC) who were treated with neoadjuvant chemotherapy (NAC). The endpoint of this study was response rate according to pathological response after NAC administration. The data were analyzed using SPSS version 21.

Results: Positive Estrogen Receptor (ER) and Progesterone receptor (PR) had a significant association with major pathological response with p-value = 0.001 and p-value = 0.04 respectively (p value<0.05 was considered statistically significant). Positive hormonal receptor showed 5-fold-higher possibility to attain major pathological response after NAC administration. Increased HER-2 expression was no associated with the occurrence of major pathological response (p=0.3). Through molecular subtype analysis, Luminal A and Luminal B (p=0.000) played a significant role as a predictor factor to achieve major pathological response after NAC administration.

Conclusion: This study showed significant association between estrogen receptor (ER) and progesterone receptor (PR) with major pathological response in patients with LABC after NAC treatment. A similar result was also shown by Luminal subtype which acted as a predictor factor for major pathological response after NAC.

Keywords: Estrogen Receptor, Progesterone Receptor, HER-2, Advanced Breast Cancer, Neoadjuvant Chemotherapy A

**The effect of Extract Virgin Olive Oil (EVOO) on post-laparotomy adhesion rates in Rattus norvegicus Rats**

Muhammad Taqwa¹, Muslim², Muntadhar M. Isa³, Jufriady Ismy⁴, Dasrul⁵

¹Specialist Medical Education Program, General Surgery, Faculty of Medicine, Universitas Syiah, Banda Aceh, Indonesia

The effect of Extract Virgin Olive Oil (EVOO) on post-laparotomy adhesion rates in Rattus norvegicus Rats

Muhammad Taqwa¹, Muslim², Muntadhar M. Isa³, Jufriady Ismy⁴, Dasrul⁵

¹Specialist Medical Education Program, General Surgery, Faculty of Medicine, Universitas Syiah, Banda Aceh, Indonesia

The effect of Extract Virgin Olive Oil (EVOO) on post-laparotomy adhesion rates in Rattus norvegicus Rats

Muhammad Taqwa¹, Muslim², Muntadhar M. Isa³, Jufriady Ismy⁴, Dasrul⁵

¹Specialist Medical Education Program, General Surgery, Faculty of Medicine, Universitas Syiah, Banda Aceh, Indonesia

ABSTRACT

Rattus novergicus 11

Published by combination after irrigation with normal saline towards post laparotomy

This study aims to determine the effect of hyaluronic acid, chitosan and its forming barrier from direct contact with other surfaces for a period of time. Chitosan are one of adhesion barrier agent, which could prevent adhesion by induced by surgical procedure inside cavum peritoneum. Hyaluronic acid and

Background: Peritoneal adhesions are pathological adhesions between the omentum, intestines and peritoneum. More than 90% of major abdominal surgeries can make postoperative adhesions. The content of fatty acids such as soybean oil, Clinicole, canola oil, omega 3 fatty acids and olive oil were studied for adhesion prevention experimentally. Extra virgin olive oil (EVOO) has been used in medical research. However, it has not been used in preventing postoperative peritoneal adhesion. The aim of this study was to determine the effect of EVOO after irrigation with 0.9% NaCl intra peritoneum on post-laparotomy adhesions in white rats.

Methods: This study was an experimental study with the post-test only control group design. Subjects were divided into 2 groups, the control group (P0), namely laparotomy rats irrigated with 0.9% NaCl as much as 5.0 ml intraperitoneal and the treatment group (P1), namely laparotomy rats irrigated with 0.9% NaCl as much as 5.0 ml continued EVOO 3.0 ml intraperitoneal. After the 8th day of treatment, the degree of intraperitoneal adhesion was assessed.

Results: Results showed that the mean macroscopic scoring of the degree of intraperitoneal adhesion after laparotomy at P1 was 1.25 ± 0.86 lower than P0. The mean amount of fibrin in the intraperitoneal adhesion tissue in P1 was 1.65 ± 0.71 which was significantly lower than that in the P0 with a value of 2.38 ± 0.65 (p <0.05). The mean number of inflammatory cells in the adhesion tissue P1 was 2.08 ± 0.78 which was significantly lower than that in the P0, namely 2.69 ± 0.51 and (p <0.05).

Conclusion: The EVOO administration after irrigation with 0.9% NaCl intraperitoneally can reduce the degree of intraperitoneal adhesion after laparotomy of white rats.

Keywords: Peritoneal Adhesion, Adhesion, Post Laparotomy, Extract Virgin Olive Oil.

The effect of use of hyaluronic acid, chitosan and the combination of hyaluronic acid with chitosan after irrigation with normal saline in intraperitoneal adhesion post-laparotomic on White rats (Rattus Novergicus)

Aulia Rahman1, Muhammad Yusuf2, Imam Hidayat2, Onarisa Ayu2, Dasril1, Jufriady Ismy2

1Student of Surgery Program, Faculty of Medicine, Universitas Syiah Kuala, Banda Aceh, Indonesia.
2Staff of Division / SMF of Surgery, Faculty of Veterinary Medicine, Universitas Syiah Kuala, Banda Aceh, Indonesia.

Background: Adhesion is a pathological condition which happened between a tissue and its surrounding. The incidence of intraperitoneal adhesion mostly induced by surgical procedure inside cavum peritoneum. Hyaluronic acid and chitosan are one of adhesion barrier agent, which could prevent adhesion by forming barrier from direct contact with other surfaces for a period of time. This study aims to determine the effect of hyaluronic acid, chitosan and its combination after irrigation with normal saline towards post laparotomy intraperitoneal adhesion on white rat (Rattus novergicus) microscopically and macroscopically.

Methods: This was a quasi-experimental study using male Wistar strain rats (n = 24) which had intraperitoneal abrasion after previous adaptations, divided into 4 groups: P0 (Rats that were laparotomy and irrigated with normal saline intraperitoneal); P1 (Rats that were laparotomy and irrigated with normal saline administration of chitosan 20 mg/ml intraperitoneal); P2 (Rats that were laparotomy and irrigated with normal saline and 30mg/ml hyaluronic acid intraperitoneal) and P3 (Rats that were laparotomy and irrigated with normal saline and 30 mg/ml hyaluronic acid combination with chitosan 30mg/ml).

Results: The P3 group were that the grading of intraperitoneal adhesion obtained was significantly lower compared to the P0, P1 and P2 groups. Histologically the scores of fibrin cells, collagen cells and inflammatory cells in adhesion tissue were also lower in the P3 group compared to the P0, P1 and P2 groups.

Conclusion: The use of a combination of hyaluronic acid with chitosan can reduce the grading of adhesion, the number of fibrin cells, collagen cells and inflammatory cells on intraperitoneal adhesion tissue better post-laparotomy at white rat (Rattus novergicus).

Keywords: Hyaluronic Acid, Chitosan, Intrapertitoneal Adhesion, White Rats

Periluminar fluids in abdominal ultrasounds as a predictor of bowel viability in pediatric patients with intussusception at Saiful Anwar Hospital, Malang, Indonesia

Widanto1, Rossy Zaki Abdillah2, Indrastuti N3, Lulik Inggarwati1, Hery Susilo4, Farhad Bal’aff5, Solimun6

1Pediatric Surgery Consultant of Surgery Department, Saiful Anwar General Hospital, Universitas Brawijaya, Malang, East of Java, Indonesia
2General Surgery Resident, Faculty of Medicine, Universitas Brawijaya, Saiful Anwar General Hospital, Malang, East Java, Indonesia
3Pediatric Consultant of Radiology Department, Saiful Anwar General Hospital, Universitas Brawijaya, Malang, East of Java, Indonesia
4Oncology Surgery Consultant of Surgery Department, Saiful Anwar General Hospital, Universitas Brawijaya, Malang, East of Java, Indonesia
5Neurosurgery Consultant of Surgery Department, Saiful Anwar General Hospital, Universitas Brawijaya, Malang, East of Java, Indonesia
6Head of Socio-Economic Statistics Laboratory, Department of Statistics Faculty of Mathematic and Natural Science, Universitas Brawijaya

Background: Intussusception is the most common cause of intestinal obstruction in children between 4 and 10 months of age. The difficulty in diagnosing intussusception in children is complicated with children who are not good in communication. Ultrasonography examination (USG) is the preferred examination to diagnose pediatric patients with suspected of intussusception. It has a 97.9% sensitivity rate, 97.8% specificity and 99.7% NPV for cases of intussusception. There are no studies that examines the volume of periluminar fluid as a predictor of bowel viability in pediatric patients with intussusception at Saiful Anwar Hospital Malang.

Methods: This is a retrospective study including patients in pediatric surgery departments in Saiful Anwar General Hospital Malang between January 2017
and July 2017. Among 30 children have abdominal ultrasound examination in emergency ward before undergo operation for intussusception.

Results: We found a significant relationship between the length of periluminar fluid and intestine viability ($p=0.008$, $r=0.469$). The higher of lumbar fluid in diameter, the lower intestinal viability ($p=0.004$, $r=-0.502$) with cutoff point 2.187 ($p=0.018$, SD 4.47-2.30). The periluminar fluid finding in abdominal ultrasound compared with operation finding (golden standard) was sensitivity 80% (CI95%: 55.2-104.8); specificity75% (CI95%; 56-94); PPV 61.5%(CI95%:35-88); NPV 88%(CI95%:73-103) and accuracy 76%

Conclusion: Within this study we identified the higher diameter/width of periluminar fluid the lower intestinal viability. This study may help to predictors for intestinal viability by abdominal ultrasound in intussusception patients.

Keywords: Perilaminar Fluid, Predictor, Bowel Viability, Intussusception, Pediatric

Accuracy of transperineal sonography and distal loopography examination in determining distal rectum-perineal distance and fistula lays in anorectal post colostomy malformation patients

Sejahtera E Halomoan, Sindu S, Hanna M, Erial Bahar
Departemen of Surgery, Faculty of Medicine, Universitas Sriwijaya, Palembang, Indonesia

Background: In children with high and intermediate anorectal malformation, distal loopography is an important investigation done to determine the relationship between the position of the rectal pouch and the probable site of the neo-anus as well as the presence or absence of a fistula. Conventionally, this is done using contrast with fluoroscopy or still X-ray imaging. This, however, has the challenges of irradiation, availability and affordability, especially in developing countries. This study compared the accuracy of trans-perineal ultrasound with distal loopography in the determination of the precise location of the distal rectal pouch and in detecting the presence and site of fistulous communication between the rectum and the urogenital tract was studied.

Methods: Trans-perineal ultrasound, distal loopography and intra-operative measurements were done sequentially for qualified infants with anorectal malformation and colostomy. Pouch skin distance and presence or absence of recto urinary or genital fistula was measured prospectively in each case. Statistical significance was inferred at P-value of <0.05.

Results: There were 21 infants, ten males and 11 females. The paired T-test results show there was a significant difference between Transperineal ultrasound and distal Loopography ($p=0.020$), with an average difference in the distal rectum-perineal distance and the fistula location was -0.38 ± 0.70 cm. Transperineal ultrasound had a sensitivity of 100.0%, specificity of 93.8%. Distal loopography had a sensitivity of 100.0%, specificity of 81.8%.

Conclusion: Transperineal ultrasonography can safely and reliably be used to assess the distal colonic anatomy and the presence of fistula in infants with Anorectal malformation who are on colostomy.

Keywords: Anorectal Malformation, Distal Loopography, Transperineal Ultrasound, Children, Congenital

Application of GSS formula model as a predictor of the amount pulmonary arterial pressure in atrial septal defect patients in Sardjito Hospital 0-12 months post surgery

Andica Yoga Artanto¹, Supomo²
¹Department of Surgery, RSUP Dr. Sardjito, Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia
²Division of Cardiovascular and Thoracic Surgery, Department of Surgery, RSUP Dr. Sardjito, Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

Background: The prevalence of pulmonary hypertension in ASD patients is found in 22% of ASD cases. Not all ASD patients with pulmonary hypertension can be closed, this depends on the severity of pulmonary hypertension that is mild (25-50mmHg), moderate (51-69mmHg), severe (> 70mmHg). In this study, we want to prove that the pulmonary artery pressure prediction formula is in accordance with the actual condition of the postoperative patient, so that it can be used to determine the prediction of postoperative pulmonary artery pressure. The results of the prediction of pulmonary artery pressure can be used to consider whether direct closure is done, or closure can be done with the addition of vasodilator drugs, closure with perforation, or administration of drugs alone.

Methods: This research is a retrospective cohort study with secondary data from the medical records of ASD patients with pulmonary hypertension who underwent ASD closure surgery at RSUP Dr. Sardjito in January 2016 -December 2019. The prediction formula is mPAP prediction= (0.24) (age) + (0.06) (mPAPpre) + (0.17)(RA dimension) + (0.47) (RVdimension)-13.79. The results of predictive calculation using the GSS formula are then compared with the real result of post-operative pulmonary arterial pressure (mPAP) with echocardiographic measurement at 0-12 months post operatively. Data analysis conducted with paired t-test and pearson correlation.

Results: Of the total 64 patients included in study, mean mPAP before surgery was 29.22. The mean mPAP prediction of 0-3 months (25.07) has a significant difference with the real result of 0-3 months (27.89) with a value of $P = 0.024$. The mean mPAP prediction of 3-6 months (25.25) did not have a significant difference with the real result for 3-6 months (26.81) with a value of $P = 0.138$ and there was a moderate correlation with a value of $r = 0.535$. Then, the mean mPAP prediction of 6-12 months (25.38) did not have a significant difference with the real result for 6-12 months (24.92) with a value of $P = 0.683$ and had a strong correlation with a value of $r = 0.624$.

Conclusion: The GSS formula can be used to predict pulmonary arterial pressure (mPAP) in ASD patients 3-6 months and 6-12 months postoperatively.

Keywords: ASD, Pulmonary Hypertension, Pulmonary Arterial Pressure, Gadjah Mada Supomo Score, GSS
Correlation between microvessel density and lymphovascular invasion with distant metastasis in breast cancer patient

Trisyse Septiawati, Ida Bagus Tjakra Wirawa Manuaba, Putu Anda Tusta Adiputra
Department of General Surgeon, Oncology Division, Faculty of Medicine, Universitas Udayana, Bali, Indonesia

Background: Breast cancer is the most common malignant tumour in Indonesia with relative frequency 18.6%. Mortality in breast cancer most are caused by distant metastasis which then causes multiple organ failure. To start a metastatic process requires the formation of new blood vessels (angiogenesis) and infiltration of the lymphatic system. Both can be assessed through microvessel density and lymphovascular invasion. Both MVD and LVI examinations can be done easily, quickly and provide more objective parameters for the prognosis, outcomes and success of therapy. Until now there is still very little research on MVD and LVI that are being done.

Methods: This study is a cross-sectional analytic study. Data retrieval from oncology surgical clinic from January 2018 - March 2019. Of the 62 biopsy samples were stained using haematoxylin eosin and were observed by one pathologist. MVD cut-off points are taken by calculating the mean and standard deviation. Bivariate analysis using Chi-Square Test and multivariate analysis using logistic regression test was used for statistical analysis.

Results: From the results of bivariate analysis it was found that the high MVD is correlated with distant metastasis (P = 0.001) and positive LVI with metastasis (P = 0.003). There is a relationship between high MVD and tumour size (P = 0.000). Multivariate analysis confirmed that high MVD and positive LVI were statistically related to the occurrence of metastasis in breast cancer patients.

Conclusion: There is significant relationship between high MVD and positive LVI to the occurrence of metastasis in breast cancer patients.

Keywords: Angiogenesis, Microvessel Density, Lymphovascular Invasion, Distant Metastasis

Relationship of blood vitamin-D levels on neoadjuvant chemotherapy response of CAF (tumor size based on ultrasonographic examination) in post menopause women with locally advance breast cancer in Dr. Soetomo General Hospital Surabaya

Arief Nur Rachmanto, Hantoro Ishardyanto, Iskandar Ali, Rosy Setiawati
1 Resident of Surgery, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital Surabaya, Indonesia
2 Staff of the Department of Surgery, Oncology Division, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital Surabaya, Indonesia
3 Staff of the Department of Radiology, Faculty of Medicine, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital Surabaya, Indonesia

Background: Breast cancer is one of the most prevalent cancer in Indonesia and the most prevalent cancer in women. Patients in Dr. Soetomo Hospital Surabaya generally comes in an advanced stage condition (locally advanced breast cancer). 52% of the patients with breast cancer in Dr. Soetomo hospital did not respond well to chemotherapy treatment. This is related to low levels of vitamin D in the blood, which decreases the therapeutic response of breast cancer.

Methods: The design of this research is a prospective cohort of patients with locally advanced breast cancer. Patients were examined for vitamin D levels and tumour mass size 1 day before the chemotherapy regiment was carried out and after 3 of CAF chemotherapy regimens were administered, an evaluation of the therapeutic response in patients was done by comparing tumour mass size before and after chemotherapy with ultrasound.

Results: There were 30 patients evaluated. 17 people (56.7%) with low level of vitamin D and 13 (43.3%) with normal level of vitamin D. The therapeutic response was obtained as follow, 13 people (43.3%) with partial response, 16 people (53.3%) with stable disease, and 1 person (3.3%) with progressive disease. Statistical tests provide significant relationship between levels of vitamin D with chemotherapy response in patients with locally advanced breast cancer (p = 0.001).

Conclusion: There is a relationship between levels of vitamin D in blood with the size of the tumour, based on ultrasound examination, as a response to neoadjuvant chemotherapy of CAF in post-menopausal women with locally advanced breast cancer in Dr. Soetomo General Hospital Surabaya

Keywords: Locally Advanced Breast Cancer, Vitamin D, Chemotherapy Response, Breast Cancer

Comparison of colonic anastomosis using dry amnion membrane and fibrin glue in intraperitoneal infection condition assessed from tissue hydroxyproline level measurement (study on Wistar rat)

Rifqi Zulfikar, Vicky Sumarki Budipramana, Hartono Kahar
1 Resident of Surgery, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital Surabaya, Indonesia
2 Staff of the Digestive Surgery Division, Department of Surgery, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital Surabaya, Indonesia
3 Staff of the Clinical Pathology Department, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital Surabaya, Indonesia

Background: Anastomotic leak in the colon is one of the causes of high morbidity and mortality in infectious cases. Various efforts have been made to prevent leakage, such as changing suture techniques and using additional materials. Materials such as fibrin glue and amnion membranes are gaining popularity in the wound healing process. This study aims to compare the use of dry amniotic membrane and fibrin glue in colonic anastomosis in intraperitoneal infection assessed with tissue hydroxyproline level measurement.

Methods: This study is an experimental study on animal with randomized post-test only group design. The study was conducted on 27 Wistar rats, male rats that have been aged 10–12 weeks with the weight of 250-300 grams. The research subjects were Wistar rat which fulfil the inclusion criteria. The study subjects were divided into 3 groups, group I (anastomosis using a simple interrupted suture only), group II (anastomosis using a simple interrupted suture and was applied with dry amniotic membrane) and group III (anastomosis using a simple interrupted suture and was applied with fibrin glue). Specimen retrieval were done in random numbering of mice. The anastomotic segment was taken...
Correlation polymorphism gene VDR APA1 with risk among balinese breast cancer patient in bali

I Putu Gede Fajar Mahayasa¹, I Ketut Widiana², Putu Anda Tusta Adiputra²

¹General Surgeon Residency, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Denpasar, Indonesia
²Oncology Surgery Division, Surgery Department, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Denpasar, Indonesia

Background: Breast cancer is the most common cancer diagnosed in women. It basically caused by a progressive accumulation of genetic disorders. Vitamin D and its receptor (VDR) have been shown to have an effect on the carcinogenesis of breast cancer. Several studies have shown VDR APA1 polymorphisms became the most prevalent polymorphism of other polymorphism variants of breast cancer. There are still lack of studies that review the relationship of VDR gene polymorphisms, especially Apa1 on breast cancer risk among Balinese women.

Method: This study is a case-control design with analytic study to see the relationship between Vitamin D receptor Apa1 gene polymorphism and breast cancer risk in Balinese women. There were 42 venous blood samples from Department of Biochemistry FK Unud. This study was carried out at the FK Unud Integrated Biomedical Laboratory from DNA isolation to sequencing to determine the sequence of gene bases. Then the data were analyzed using SPSS 16.

Results: Univariate analysis showed the characteristics of the subject and research variables. Bivariant analysis showed that the presence of VDR Apa1 polymorphism in Balinese women increased the risk of breast cancer by 5.846-fold higher compared to women without polymorphism (CI95%:1.065-32.082; P = 0.03). Multivariant analysis confirmed that the VDR Apa1 polymorphism independently influence and increase the risk of breast cancer without being influenced by other variables (95% CI: 1.065-32.082; P = 0.042).

Conclusion: In this study has shown VDR Apa1 polymorphism significantly associated and increased the risk of breast cancer in women in Bali.

Keywords: Breast cancer, Polymorphism, Vitamin D-Receptor, APA1

Risk of post-operative pain in sling versus no-sling after rotator cuff repair: meta-analysis of RCT

Gregorius Thomas Prasetyo¹, Mona Galatia Marpaung¹, Alice Valeria¹
¹Mardi Rahayu Hospital, Kudus, Indonesia

Background: Shoulder pain is a highly prevalent complaint and disorders of the rotator cuff (RC) are thought to be the most common cause. Our understanding of the optimal approach to post-operative rehabilitation, a critical component of the recovery process, is poor. This meta-analysis will analyse which rehabilitation technique (sling and no-sling) is more favourable to decrease VAS Score.

Method: This meta-analysis was conducted based on PRISMA guidelines. The electronic search was conducted using keywords (Rotator Cuff Repair) AND (Sling OR Rehabilitation OR Motion) AND (VAS Score) in PubMed and Google Scholar. This review included full-text studies (randomised controlled trials) in English comparing sling and no-sling rehabilitation in patients with rotator cuff repair in the last 5 years. Statistical analysis was done using EpiYudin (Indonesia).

Result: This study 3 Randomized Controlled Trial (RCT) studies from 2015 to 2020 with a total of 359 samples. Pooled analysis revealed no statistically significant differences in VAS score between sling vs no-sling rehabilitation. 6 weeks post operation MD: 0.003 95% CI ((-0.41)-0.425) p: 0.367 P: 0.18%, 12 weeks post operation MD : 0.414 95% CI (-0.572) -1.401) p: 0.005 P: 81.02% and 24 weeks post operation MD : 0.259 95% CI (-0.298)-0.815) p: 0.078 P: 60.79%

Conclusion: There was no superiority between one rehabilitation technique toward another.

Keywords: Risk, Post-Operative Pain, Sling, No-Sling, Rotator Cuff Repair

The relationship between platelet-lymphocyte ratio in breast cancer subtype Luminal A, Luminal B, Her2-E, and TNBC with the risk of distant metastases

Dayat Prabowo, Teguh Aryandono, Sumadi Lukman Anwar
Department of Surgery, Faculty of Public Health Medicine and Nursing, Universitas Gajah Mada, RSUP Dr. Sardjito Yogyakarta

Background: Breast cancer subtypes are associated with different metastatic patterns and have different prognostic effects. Tumour characteristics and host response, including inflammatory response, both contribute to the clinical outcome of cancer patients. Histopathological analysis of tumours showed tumour infiltration by inflammatory cells and lymphocyte cells. Tumour cells have been shown to induce the formation of platelet stimulating factors that support the growth, invasion and metastasis of primary tumours through several mechanisms. The platelet / lymphocyte ratio (PLR) is a marker that is easily measured, and has a prognostic role in many types of cancer, including breast cancer.

Methods: In this study, retrospectively evaluated female breast cancer patients who underwent surgery at the RSUP Dr. Sardjito from January 2018...
to December 2019. From the medical record, the data needed in the study will be taken, namely data on routine blood tests of patients before surgery and/or chemotherapy, data for examining breast cancer subtypes (status and positivity of ER and PR, HER2) with immunohistochemistry and available investigative data (X-rays, bone survey, abdominal ultrasound, CT scan, etc.) to evaluate distant metastases. Data analysis was performed using SPSS for Windows, version 24 (SPSS, Chicago, IL, USA) with univariate and bivariate statistical analysis with Pearson Chi-Square.

Results: The results obtained with OR = 1.603, 95% CI: 1.002-2.563, p. = 0.048, regarding the relationship between high PLR and distant metastases, it shows that there is a significant relationship between high PLR and distant metastases, while with p value = 0.555; showed that there was no significant relationship between the PLR ratio and the subtype of breast cancer.

Conclusion: There was no significant relationship between the PLR ratio and the subtype of breast cancer. However, there was a significant relationship between the PLR ratio and distant metastases.

Keywords: PLR ratio, breast cancer, immunohistochemistry, molecular subtypes, distant metastases

Changing in left ventricular end diastolic dimension after mitral valve replacement in severe mitral regurgitation patient in Kariadi Hospital (2016-2019)

Pangeran Aitara, Sahal Fatah
1PPDS-I Of General Surgery, Medical Faculty of Universitas Diponegoro, Kariadi General Hospital, Semarang, Indonesia
2Staff of Thoracic and Cardiovascular Surgery, Faculty of Universitas Diponegoro, Kariadi General Hospital, Semarang, Indonesia

Background: Mortality from Mitral Regurgitation in 5-year survival in untreated patients increases by 60-70%, mostly due to heart failure, characterized by left ventricular dysfunction. The mortality rate decreases in Mitral Valve Replacement from 12 - 16%, which can be evaluated 6 months after the operation with echocardiography. Because of that, researcher want to examine the improvement in left ventricular function (LVIDd) after MVR surgery.

Methods: Pre-post test design in the target population of patients with RM grade 3 and 4 in RSDK Semarang in 2016-2019 who underwent MVR at IBS RSDK. LVIDd assessment with pre-MVR echocardiography and 6 months post-MVR in the cardiology department of RSDK Semarang. Data analysis using delta T-test and Wilcoxon test. The correlation of pre-post test with Pearson correlation test.

Results: The mean of LVIDd was 74 patients with RM, preoperative 42.41 ± 8.95 mm, postoperative 36.83 ± 11.36 mm for RM degree 3 and 31.83 ± 1.48 mm preoperatively, 31.37 ± 1.35 mm postoperatively for grade 4 RM. Variation in degree 3 and 4 in RSDK Semarang in 2016-2019 who underwent MVR at IBS RSDK. LVIDd assessment with pre-MVR echocardiography and 6 months post-MVR in the cardiology department of RSDK Semarang. Data analysis using delta T-test and Wilcoxon test. The correlation of pre-post test with Pearson correlation test.

Results: The least graft viability (72.8 ± 20.7%), highest secondary contraction (11.4±10.5%) and fibroblast count (331.8±88.6 cells/5 high power fields) were observed in MD group. More collagen synthesis was observed in subjects that consumed caffeine. The level of secondary contraction and fibroblast count, as well as graft viability and collagen synthesis were positively correlated.

Conclusions: Daily consumption of caffeine impairs graft viability when taken in medium dose and increases collagen synthesis irrespective of dosage.

Keywords: Caffeine, Autologous, Graft, Full-thickness skin graft, Wound, Healing

The effects of caffeine consumption on autologous full-thickness skin graft healing

Tommy Supit, Neni Susilaningsih, Awal Prasetyo, Najatullah
1Department of General Surgery, Faculty of Medicine, Universitas Diponegoro, Dr. Kariadi General Hospital, Semarang, Indonesia
2Department of Histology, Faculty of Medicine, Universitas Diponegoro, Semarang, Indonesia
3Department of Anatomical Pathology and Biomedical Sciences, Faculty of Medicine, Universitas Diponegoro, Semarang, Indonesia
4Department of Plastic Surgery, Faculty of Medicine, Universitas Diponegoro, Dr. Kariadi General Hospital, Semarang, Indonesia

Background: The main objective is to investigate the effect of daily caffeine consumption on Full-thickness skin graft (FTSG) healing.

Methods: Forty rats were randomized into 4 groups of equal size; control (CD), low (LD), medium (MD) and high caffeine dose (HD) caffeine. After autologous FTSG, all subjects in the intervention group were given daily pure caffeine. The FTSG was explanted seven days post-transplant. The graft viability, secondary contraction, adherence, fibroblast and collagen deposition was analyzed.

Results: The least graft viability (72.8 ± 20.7%), highest secondary contraction (11.4±10.5%) and fibroblast count (331.8±88.6 cells/5 high power fields) were observed in MD group. More collagen synthesis was observed in subjects that consumed caffeine. The level of secondary contraction and fibroblast count, as well as graft viability and collagen synthesis were positively correlated.

Conclusions: Daily consumption of caffeine impairs graft viability when taken in medium dose and increases collagen synthesis irrespective of dosage.

Keywords: Caffeine, Autologous, Graft, Full-thickness skin graft, Wound, Healing

The effect of ethanolic extract from Moringa oleifera leaves in number of fibroblast, collagen density, and wound size on Wistar rats burn wound

Duta Indriawan, Trilaksana Nugroho, Neni Susilaningsih
1Second Degree Student of Biomedic Science — General Surgery Resident of Medical Faculty, Universitas Diponegoro, dr. Kariadi General Hospital, Semarang, Indonesia
2Biomedic Lecturer of Medical Faculty, Universitas Diponegoro, dr. Kariadi General Hospital, Semarang, Indonesia

Background: Burn wound are a type of trauma that causes high morbidity and mortality. Silver sulfadiazine (SSD) is a topical therapy that is often used for treatment of burns. Moringa oleifera (MO) is an herbal plant that has therapeutic potential for burn wound healing. This study aims to prove the effect of ethanolic extract from MO leaves in number of fibroblast, collagen density, and wound size on Wistar rats burn wound.

Method: The design of this research was Randomized post-test only with control group design. The experimental animals are 24 male Wistar rats aged 2 months. After induced by partial thickness burn wound, the rats were randomly divided into 4 groups with 6 rats for each group. Every day,
ABSTRACT

the rats given MO 10%(I), Combination of topical MO 10% and SSD (II), topical SSD (III), and pure vehiculum (IV). On the tenth day, assessment was done towards the macroscopic status of the size of burn wound in rats and microscopic investigation of burn wound tissue. The number of fibroblasts was assessed by Haematoxylin-Eosin staining. Collagen density was assessed by Masson’s Trichrome staining. Data was analysed and processed using statistic test with SPSS 25.0.

Result: The number of fibroblast in all group showed no significant difference (p=0.141). Collagen density in group I compared to group IV (p=0.016) and group II compared to group III and IV (0.047, 0.009). Significant differences were also found in wound size between group II and group IV (p=0.029).

Conclusion: Ethanolic extract from Moringa oleifera leaves proved to be effective in increasing collagen density and decreasing wound size.

Keywords: Moringa oleifera, Silver Sulfadiazine, Fibroblast, Collagen Density, Wound Size.

The effect of glutathione as adjuvant therapy on levels of TNF-α and IL-10 in Wistar rat peritonitis model

Dila Junita1, Endang Mahati2, Agung Aji Prasetyo3, Muflihatul Muniroh4, Tri Nur Kristina5

1General Surgery Department, Faculty of Medicine, Universitas Diponegoro, Semarang, Indonesia
2Pharmacology Department, Faculty of Medicine, Universitas Diponegoro, Semarang, Indonesia
3Pediatri Surgery Department, Faculty of Medicine, Universitas Diponegoro, Semarang, Indonesia
4Physiology Department, Faculty of Medicine, Universitas Diponegoro, Semarang, Indonesia
5Clinical Microbiology Department, Faculty of Medicine, Universitas Diponegoro, Semarang, Indonesia

Background: Peritonitis is the second most common cause of severe sepsis that associated with a significant mortality rate. Due to a large gap of newer antibiotics innovation and antibiotic resistance emergence, the best possible use of the available therapeutic resources is very important for management of peritonitis. It has been studied that glutathione as an alternative in the development of new anti-inflammatory agents. Thus, the aim of this study was to evaluate the levels of TNF-α and IL-10 as the effect of glutathione administration as adjuvant therapy in rat peritonitis model.

Methods: Male Wistar rats were divided into four groups (n= 6 per group), Group 1: control group (C), Group 2: peritonitis group (P), Group 3: peritonitis + Ceftriaxone group (P+Cef), Group 4: peritonitis + Ceftriaxone + Glutathione group (P+Cef+Glu). Twenty-four hours after peritonitis induction, the blood samples were taken to evaluate TNF-α and IL-10 levels.

Results: There was a significantly increase of mean TNF-α level in group 4 (P+Cef+Glu) (p value 0.02). No significant change in IL-10 levels in rats peritonitis model.

Conclusions: Glutathione supplementation is significantly decreasing the mean level of TNF-α in rats induced peritonitis, however there is no difference compare to antibiotic only. Moreover, there no significant changes level of IL-10 in rats induced peritonitis after glutathione injection.

Keywords: Glutathione, TNF-α, IL-10, Rat, Peritonitis

Case report: right hepatic artery pseudoaneurysm after choledoco-duodenostomy

Ahmad Fathi Fuadi, Erik Prabowo, A. Gunawan Santoso

Department of General Surgery, Faculty of Medicine, Universitas Diponegoro, Dr. Kariadi Hospital, Semarang, Indonesia

Background: Pseudoaneurysm of right hepatic artery is a rare complication after bile duct injury (BDI) repair. An unidentified rupture of pseudoaneurysm will lead to mismanagement of this fatal complication. Massive haemorrhage can present and causes high mortality

Case Presentation: We report a 60-year-old female who suffered jaundice and massive upper gastrointestinal bleeding two weeks after choledoco-duodenostomy bypass surgery. That procedure was done because of BDI after laparoscopic cholecystectomy. Embolization was carried out after identifying a pseudoaneurysm of right hepatic artery to stop bleeding. Bleeding was transiently stopped, and rebleeding occurred several weeks later. Surgery was performed because of repeated bleeding after third embolization. Ruptured pseudoaneurysm to choledoco-duodenostomy anastomosis was found. Pseudoaneurysm was resected and right hepatic artery was sutured. Choledoco-duodenostomy was closed. Continuity of biliary tract was maintained by re-reconstruction choledoco-jejunostomy roux n Y. Upper gastrointestinal bleeding symptom was disappeared, and bilirubin level was returned to normal at outpatient follow up after operation.

Conclusion: This patient had a hemobilia because of ruptured right hepatic artery pseudoaneurysm. Triad Quincke which consist of right upper quadrant pain, jaundice and upper gastrointestinal bleeding, occurs in 30% of patient with hemobilia. This sign of hemobilia after biliary tract procedure must be managed quickly and accurately. Angiography is main diagnostic procedure. Arterial embolization is first line intervention to stop the bleeding. Surgery is preserved in case where rebleeding occurs. Good anatomical knowledge can prevent this complication.

Keywords: Right Hepatic Artery, Pseudoaneurysm, Choledoco-duodenostomy

Wide excision basal cell carcinoma eyelid with the supraclavicular artery island flap as a salvage option for defect reconstruction

Anak Agung Bagus Tananjaya Wiyasa, Ida Bagus Surya Wisesa

Department of General Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia

Background: The most common eyelid skin cancer is basal cell carcinoma (BCC). The most important management in this case is to prevent the recurrence rate by doing wide excision and getting good cosmetic results after reconstructing the defect from wide excision. In this case, a pedicle flap vascularized by the supraclavicular artery may be considered an alternative to the flap. This flap is called the supraclavicular artery island flap (SCAIF). This case report aims to demonstrate the management of extensive excision of basal cell carcinoma of
ABSTRACT

the eyelid and extensive defects after tumor removal.

Case Presentation: A 47-year-old woman with aggressive inferior palpebral BCC extending to the left zygomaticomaxillary and infiltrating the left eye. The location of the tumor is inferior to the left eyelid with a size of 6 cm x 4 cm. On CT scan the head shows infiltration into the left ocular bulb, without destruction to the left maxillary bone.

Conclusion: Management for facial BCC remains challenging especially the risk of recurrence after tumor removal and postoperative outcome including techniques for reconstructing extensive defects. The decision to choose the appropriate technique for reconstructing the defect after surgery will give optimal functional and cosmetic results. SCAF demonstrates minimal anatomical variation which may be a simple reconstructive modality for the novice surgeon. And it can be a favorable option for patients with wide excision in the head and neck area.

Keywords: Basal Cell Carcinoma, Wide Excision, Supraclavicular Artery Island Flap

Bilateral mustarde rotational flap for large facial defect following resection of basal cell carcinoma

Lisca Namretta, Feri Nugroho
Iskak Tulungagung General Hospital, East Java, Indonesia

Background: Large facial defects following resection of malignant tumour remain a challenge for reconstructive surgeons. Different technique remains controversial to minimize complication and morbidity with acceptable cosmesis results.

Case Presentation: 87-year-old woman with recidive basal cell carcinoma at nasal region which extended to right choanae, maxillary, sphenoidal, frontal and ethmoidal sinus. The patient was diagnosed as basal cell carcinoma after wide excision of 2x2 cm lesion at supra alar crease of right nasal approximately 1 year before. Tumour reoccurred as 2.5x3 cm lesion on the same region approximately 6 months after. Another wide excision was performed, with clear margin of sample excised, and nasal reconstructive procedure including freshening, z-plasty on nostril, and skin flap at columella was performed approximately 6 months after. Patient came back with pain on nasal and face region 1 month after, and extension of the tumour was found on head CT. Another wide excision was performed with segmental osteoplasty and osteotomy of right maxillary bone and nasal sinuses. Bilateral Mustarde flap was performed right after, and 2 nasogastric tubes was inserted on nostrils.

Conclusion: The Mustarde cheek rotation flap has proved to be an extremely successful and reliable technique for repairing large defects of the lower lid. This technique was found to be a good option with acceptable cosmetic results and low complication rate. In this case, bilateral Mustarde rotational flap was performed to fill the medial defect with good symmetrical result.

Conclusion: Bilateral Mustarde rotational flap could be a good option for large facial defect

Keywords: Mustarde Rotational Flap, Resection, Basal Cell Carcinoma

Transoral Endoscopic Thyroidectomy Vestibular Approach (TOETVA) for thyroid nodules: a series of the first 12 patients in Prof. Dr. R.D Kandou General Hospital

Victor Pontoh, Marselus Merung, Christian Manginstar, Riston Regor S
Department of General Surgery, Faculty of Medicine, Universitas Sam Ratulangi, Prof. Dr. R.D Kandou General Hospital, Manado, Indonesia

Background: Thyroidectomy is the most commonly performed surgical procedure general surgeons. The main reason for adopting the endoscopic technique is the aesthetic result, which is achieved by reducing the size of the scar, or by placing it in a less visible area. TOETVA is a very new technique performed with conventional laparoscopic instruments. This study aims evaluate the patients with solitary or multinodular goiter and or papillary thyroid carcinoma who underwent Transoral Endoscopic Thyroidectomy Vestibular Approach.

Methods: There were 12 patients who underwent TOETVA from January 2018 to December 2019 at Prof. Dr. R.D Kandou General Hospital. Outcomes and measures included conversion to open surgery, operative time, intraoperative blood loss, size of the thyroid gland, post-operative hospital stay, visual analogue pain scores, and post-operative complications.

Results: Ten patients were operated between January 2018 to December 2019. All were women, aged 33-64 years. The size of the nodule ranged from 2 cm to 7 cm. One patient conversion to open isthmus lobectomy.

Conclusion: TOETVA was replicated in the local setting and a presentation of the perioperative data of all the patients who underwent this novel technique, the indications, as well as surgical and patient outcomes, were described.

Keywords: Thyroidectomy, Minimally Invasive Surgical Procedures, Thyroid Neoplasms, Endoscopy.

Appendicovesicostomy: the mitrofanoff procedure in the treatment of a female patient with neurogenic bladder using umbilicus as a stomal site

Bintang Sinurat, Christof Toreh, Richard Monoarfa
Department of General Surgery, Faculty of Medicine, Universitas Sam Ratulangi, Prof. Dr. R.D Kandou General Hospital, Toto Kabila Hospital, Manado, Indonesia

Background: Variety of Mitrofanoff techniques have been described for creating a continent catheterisable channel leading to the bladder, which avoids the native urethra. A variety of tissue segments have been used for creating the conduit, but the two popular options in the current urological practice remain the appendix and Yang-Monttransverse ileal tube. We applied Mitrofanoff Principle to construct a catheterizable conduit for this patient. We report this case and discuss the merit of using the appendix as a stoma and the umbilicus as a stomal site.

Case Presentation: We examined a case of neurogenic bladder which a clean intermittent catheterization (CIC) has been performed since the patient early childhood. In this case, CIC has not provided an adequate voiding control and the persistent incontinence of the patient remains the same. Pursuant to the
Mitrofanoff Principle, we used the appendix as a catheterizable conduit, which was constructed to the umbilicus.

**Conclusion:** Mitrofanoff procedure has an early reoperation rate for bleeding, bowel obstruction, anastomotic leak or conduit breakdown of up to 8% and the most common long-term complication noted is stomal stenosis resulting in difficulty of catheterizing the conduit. However, Mitrofanoff remains the best option to treat patient with neurogenic bladder.

**Keywords:** Appendicovesicostomy, Mitrofanoff, Neurogenic Bladder

### The benefit of topical medical honey in the cranio-cervical necrotizing fasciitis wound care: an evidence-based case report

**M Arza Putra, Umayah Asnandri**

**Background:** Necrotizing fasciitis known as flesh eating disease is a soft tissue infection that spread through fascia and subcutaneous region that can be fatal if not well treated. The main treatments are resuscitation, intravenous antibiotic, wound debridement, and appropriate wound care. A good wound care is needed to prevent complication and progression of the disease. Honey is one of wound care alternative which effectivity is well known. This report was made to know the effectivity of topical honey in cranio-fascio-cervical necrotizing fasciitis wound care.

**Methods:** Literature searching was done in Cochrane Library, EBSCOhost, Clinical Key, Pubmed, dan Proquest database. The research papers were selected based on exclusion and inclusion criteria and were critical appraised using the tools from The Joanna Briggs Institute. Four articles were found to be relevant to the topic. An experimental research was not found, there were only case report articles.

**Results:** The result was topical honey can be used as adjuvant therapy in cranio-fascio-cervical Necrotizing fasciitis wound care and also it can be used as alternative wound dressing in those who are poor surgical candidates.

**Conclusion:** Topical honey can be used as adjuvant therapy in cranio-cervical Necrotizing fasciitis wound care based on level of evidence number 4. Further clinical studies are needed to know the efficacy and safety of honey dressing in cranio-cervical Necrotizing fasciitis wound post debridement.

**Keywords:** Cranio Cervico Necrotizing Fasciitis, Topical Honey, Wound Care

### Double underpad technique as alternative stoma bag

**Abdul Rauf Rachim, Harsali Lampus**

Surgery Department, Pediatric Surgery Division, Prof Dr. R. D. Kandou Hospital, Manado, North Sulawesi, Indonesia

**Background:** Stoma refers to a surgically created opening of a hollow organ on the surface of the body to enable waste excretion products. The most commonly occurring complications of stoma of the small and large intestine is Cutaneous irritation. The waste passed out from a colostomy is usually drainable or non-drainable stoma bag is used. This study aim to evaluate the double diaper technique as an alternative stoma bag to avoid cutaneous irritation.

**Methods:** Three samples with anorectal malformation who had undergone stoma surgery at Prof Kandou Hospital from December 2019 to May 2020.

**Results:** Double diaper technique is used as an alternative stoma bag, it can prevent skin irritation around the stoma, tools and materials easily available.

**Conclusion:** Skin irritation around the stoma is one of the commonly complications. more research needs to be made on more appropriate, easily available for stoma care.

**Keywords:** Stoma, Anorectal, Double Underpad

### Haemobilia as complication of blunt hepatic trauma: a case report

**I Made Maha Satya Dwi Palguna¹, Ketut Wiargitha²**

¹Resident of Surgery Department, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia
²Division of Trauma, Surgery Department, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia

**Background:** Bleeding into the biliary system due to the presence of fistula between a blood vessel and biliary tree is a rare condition complicating blunt hepatic trauma, accounting for <3% of cases. High suspicion of haemobilia should always be considered in patients presenting with right upper quadrant (RUQ) abdominal pain, upper gastrointestinal bleeding and jaundice. Initial assessment using laboratory examination to detect elevated bilirubin, liver enzymes and bedside ultrasonography may be helpful to support diagnosis. Further examination with CT Angiography (CTA) and/or endoscopic retrograde cholangiopancreatography (ERCP) are critically important to confirm the diagnosis, in addition it can also be used for therapeutic procedures to stop bleeding.

**Case Presentation:** We report a 21 years old female patient presented with RUQ pain, late onset of hematemesis melena and jaundice after road traffic accident. Laboratory examination revealed low level of haemoglobin, elevated total and direct bilirubin, increased AST and ALT. Imaging studies using ultrasonography reported hypoechoic lesion in right hepatic lobes, while CT scan (without angiography) examination revealed intraparenchymal hematoma and suspected intraluminal blood clot in gaster and gall bladder. This patient was treated conservatively aimed to replace blood loss and control haemorrhage. ERCP was planned to further investigate bleeding in bile duct, source of bleeding and to restore bile flow.

**Conclusion:** A conservative treatment to reduce blood loss by control the haemorrhage has provided a good clinical outcome to the patient with haemobilia as complication of blunt hepatic trauma.

**Keywords:** Haemobilia, Blunt Liver Trauma, Complication

### Klippel-Trenaunay Syndrome (KTS) in adolescence patient: a rare case report from Sanglah Hospital

**Ketut Putu Yasa¹, Pascal Samuel Natigor²**

¹Department of Surgery, Thorax Cardiovascular Surgery and Endovascular Division, Universitas Udayana, Sanglah Hospital, Denpasar, Bali, Indonesia
²Resident of Surgery, Department of Surgery, Universitas Udayana, Sanglah Hospital, Denpasar, Bali, Indonesia

**Background:** Klippel-Trenaunay Syndrome (KTS) is a rare congenital disorder It is a rare congenital vascular disorder with incidence of 1 in 100,000. (KTS) is that historically has been defined as the triad of capillary malformation,
venous malformation, and limb overgrowth. Until now, the therapeutic still controversial, so there are still unsatisfactory results.

**Case Presentation:** A male 17-years-old with pain in the left leg since 5 months ago. Pain from the groin to the tips of the feet. Feet feels limp, wounds on the feet, the legs changed color with a firm border since 5 months ago and swelling. The patient was present the main component of KTS such as venous malformation and limb hypertrophy, dominant pain and spontaneous bleeding. DSA examination is performed to exclude the arteriovenous fistula to established KTS. Operator performed ligation and debridement to control bleeding and preserved wound, still not have satisfactory result, need more researches to improve quality of life in progressive disease.

**Conclusion:** The ligation and debridement to control bleeding and preserve wound still not have satisfactory result in KTS.

**Keywords:** Klippel-Trenaunay Syndrome (KTS), Adolescent, Rare Case

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**Laparoscopic cholecystectomy in a 9 year old male with gallstones and Evans Syndrome: a rare case report at Sanglah General Hospital**

Gusti Ngurah Krisna Dinatha, Kadek Deddy Aryanta, I Made Darmajaya, Ketut Ariawati

1. General Surgery Resident, Medical Faculty, Universitas Udayana, Sanglah General Hospital, Denpasar, Bali, Indonesia
2. Subdivision of Paediatric Surgery, General Surgery Department, Medical Faculty, Universitas Udayana, Sanglah General Hospital, Denpasar, Bali, Indonesia
3. Pediatric Department, Medical Medical Faculty, Universitas Udayana, Sanglah General Hospital, Denpasar, Bali, Indonesia

**Background:** Gallstones are relatively rare in children. Overall prevalence in Europe is 0.13% to 0.2% in children. Risk factors in childhood cholelithiasis, can be haemolytic causes (20-30%). Evans syndrome (ES) is an uncommon autoimmune disease that was defined by Robert Evans in 1951 when he studied the relationship between autoimmune haemolytic anaemia (AIHA) and immune thrombocytopenic purpura (ITP).

**Case Presentation:** Nine years old patients treated by paediatric to paediatric surgery with chief complaints of right upper abdominal pain and fever with eyes and the skin is yellow. The patient’s disease history was diagnosed with Evans Syndrome since 2015 and have received regular transfusion therapy and corticosteroid drugs. Laboratory tests revealed anemia, thrombocytopenia, increased direct bilirubin, reticulocytosis, elevated levels of alkaline phosphatase (ALP), Gamma GT, and liver enzymes (AST and ALT), with lactate dehydrogenase (LDH) levels within normal limits, HBsAg and Anti-HCV is non-reactive. On physical examination. In addition, the plain thorax and abdominal x-rays demonstrated free gas under both diaphragm. Peptic perforation is the most prevalent surgical emergency. With high mortality and morbidity, peptic perforation is most commonly present in the first part of the duodenum (35%-65%), with 25%-45% located in the pylorus, and 5%-25% in the stomach. The etiological factors responsible for peptic perforation and annual incidence vary depending upon sociodemographic factors. The factors that contribute the most for occurrence of peptic perforation are Helicobacter pylori infection and chronic use of NSAIDs.

**Conclusion:** Multiple peptic perforations are rare but could potentially be lethal if missed. One should always keep the possibility of multiple perforations in mind. Analgesic abuse appears to be the underlying cause for multiple perforations.

**Keywords:** Multiple peptic perforation, NSAIDs Abuse

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**Multiple peptic perforation: case report and literature review**

So Zanolo Krisna Payana, Bambang Am Setya

1. General Surgery Resident, Hasan Sadikin Hospital, Universitas Padjadjaran, Bandung, Indonesia
2. Consultant of Digestive Surgery, Department of Surgery, Hasan Sadikin Hospital, Universitas Padjadjaran, Bandung, Indonesia

**Background:** Perforation peritonitis is the most common surgery performed in an emergency. Upper gastrointestinal tract perforation is more common than lower gastrointestinal perforation. Multiple peptic perforations in an individual are a relatively rare entity, with fewer than 10 cases reported in the literature, but could potentially be lethal if missed. The factor that contributes the most for the occurrence of multiple peptic perforations is analgesic and steroid abuse.

**Case Presentation:** We report a 59 years old female suffering from upper abdominal pain that diffuse to whole abdominal for three days. She felt continuous pain with no complaint of nausea, vomit, and fever. There is history of analgetic and traditional medicine consumption since four months ago because of her leg pain. The calibre of stool and blackened stool were absent. There is abdominal muscular resistance and tenderness that observed on physical examination. In addition, the plain thorax and abdominal x-rays demonstrated free gas under both diaphragm. Peptic perforation is the most prevalent surgical emergency. With high mortality and morbidity, peptic perforation is most commonly present in the first part of the duodenum (35%-65%), with 25%-45% located in the pylorus, and 5%-25% in the stomach. The etiological factors responsible for peptic perforation and annual incidence vary depending upon sociodemographic factors. The factors that contribute the most for occurrence of peptic perforation are Helicobacter pylori infection and chronic use of NSAIDs.

**Conclusion:** Multiple peptic perforations are rare but could potentially be lethal if missed. One should always keep the possibility of multiple perforations in mind. Analgesic abuse appears to be the underlying cause for multiple perforations.

**Keywords:** Multiple peptic perforation, NSAIDs Abuse

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**Multitrauma penetrating iron on thorax through multidisciplinary surgical approaches: extreme and unique case**

Ronadi, Daniel Bayuadi, Imam Suseno

1. Surgery Department, Medical Faculty, Universitas Brawijaya, General Hospital Dr. Saiful Anwar, Malang, Indonesia
2. Thoracic and Cardiovascular Surgery Department, Medical Faculty, Universitas Brawijaya, General Hospital Dr. Saiful Anwar, Malang, Indonesia

**Background:** Multitrauma with iron penetration on thorax is an extreme and unique case presentation on emergency cases, amount 13% from all injuries. Multidisciplinary management must be carried out. 10%-15% need emergency operation for live saving due to shock and related visceral injuries.

**Case Presentation:** We report successful multidisciplinary management on 49-year-old male patient with multitrauma falling from 4 meters high landing on iron in the upper left shoulder and penetrate into the right thoracic cavity.
ABSTRACT

**Conclusion**: Multitrauma with penetrating thoracic injuries requires immediate action, appropriate resuscitation, immediate transport to tertiary hospitals, prompt diagnosis and immediate surgical intervention by a multidisciplinary team can improve clinical outcomes and minimize mortality.

**Keywords**: Multitrauma, Thorax Penetrating Trauma, Hemathothorax

**Panurethral stricture treated using dorsal onlay Buccal Mucosa Graft (BMG) urethroplasty: a case report**

Giovani Patrio Odo, Gede Wirya Kusuma Duarsa
Department of Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia

**Background**: Management of a panurethral stricture is a urological challenge. We presented a case of a panurethral stricture treated using Dorsal onlay BMG urethroplasty.

**Case Presentation**: A 53-year-old man visited the urology department complaining of difficulty urinating after undergoing prostate surgery 3 months ago. Currently the patient is urinating with a supra pubic catheter. Bipolar Voiding retro cystography (BVUC) examination shows panurethral stricture was obtained. The patient previously underwent meatoplasty and urethral dilatation procedures but failed. During surgery showed that the urethral lumen stricture more than 17 cm. Patient then undergo dorsal onlay buccal mucosa graft urethroplasty. Through the midline perineal incision, the bulbocavernous muscle is divided so that the corpus spongiosum of the anterior urethra. Then the stricture urethral segment was identified at approximately 17 cm, then a buccal mucosal graft of sufficient length was obtained. The graft is sutured, spread and layered over the corpora cavernosa using multiple 5-0 polyglactin, quilting sutures for good supported strengthening and minimizing dead space.

**Conclusion**: Dorsal onlay urethroplasty is a technique with good surgical results. The surgeon must understand the exact indications for each treatment method so as not to complicate the handling of the case.

**Keywords**: Urethral Stricture, Buccal Mucosa, Graft

**Simultaneous resection on patient with synchronous colorectal liver metastasis: two cases**

Celine Martino, Michael Tendean, Toar D. B. Mambu, Ferdinand Tjandra
1General Surgery Resident, General Surgery Department, Medical Faculty of Universitas Sam Ratulangi, Prof. Dr. R. D. Kandou, Manado, Indonesia
2Staff of Digestive Surgery Division, General Surgery Department, Medical Faculty of Universitas Sam Ratulangi, Prof. Dr. R. D. Kandou, Manado, Indonesia

**Background**: Colorectal cancer (CRC) is ranked as third most common cancer worldwide. One of the main causes of death in CRC’s patient is due to its metastasis. Liver is the most common site of metastasis. The best treatment to achieve long-term, survival and cure patients with CRC liver metastasis is surgery, whether it’s sequential, delayed, or simultaneous resection. This study aims to describe 2 patients treated surgically for CRC with synchronous liver metastasis.

**Methods**: From January-June 2020, in Prof. Dr. R. D. Kandou General Hospital, Manado, 2 patients were treated with simultaneous resection for CRC with resectable synchronous liver metastasis. Blood loss, bile leak, ascites, and post hepatectomy liver failure (PHLF) were observed as outcome parameters.

**Results**: First patient is male, 61 years old, with adenocarcinoma colon of hepatic flexure (cT4N2M1) infiltrating duodenum pars 2; right hemicolectomy, primary repair D2, and pyloric exclusion were performed, along with non-anatomical liver resection of segment 7-8. Blood loss was 900 cc, mostly due to definitive surgery for the CRC. Second patient is male, 70 years old, with distal third adenocarcinoma recti (cT4bN2M1). Abdomino-perineal resection with total mesorectal excision, and non-anatomical liver resection segment 3-7 was performed. Blood loss was 500 cc. Glissonian pedicle approach was performed for liver hilum control. Post-operative bile leak, ascites, PHLF, and mortality weren’t detected.

**Conclusion**: Simultaneous resection is safe and exhibits advantages in long-time survival of patients. However, incidence of complications and mortality are higher in simultaneous resection than in staged resection.

**Keywords**: colorectal cancer, liver metastasis, liver resection

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**Penile gangrene as a priapism sequela due to CML: the first report in Indonesia**

Eka Putri Maulani, Heru Prasetya, Deddy Rasyidan Yulizar
1Surgery Department, Faculty of Medicine, Universitas Lampung Mangkurat, Ulin General Hospital, Banjarmasin, Indonesia
2Urology Division, Surgery Department, Faculty of Medicine, Universitas Lampung Mangkurat, Ulin General Hospital, Banjarmasin, Indonesia

**Background**: Penile gangrene is one of the rare sequelae of priapism. Several malignancy diseases have been related with priapism, including Chronic Myelogenous Leukemia (CML). Penile gangrene is associated with priapism due to in histologically, by twelve hours, corporal smooth muscle biopsies show interstitial oedema, progressing to destruction of the sinusoidal endothelium, exposure of the basement membrane and thrombocyte adherence at 24 hours. We report a case of a 45-year-old male with a previously unknown CML blood disorder and late priapism.

**Case Description**: “Snake Manouver Shunting” procedure has been done in regional hospital around 300 km from the province hospital, but after several days of treatment, the patient developing Fournier Gangrene in the scrotum and the penis appears blackened and begins to lose its function. At 48 hours, thrombi can be found in the sinusoidal spaces and smooth muscle necrosis with fibroblast-like cell transformation is evident. Priapism is a rare initial presentation of CML occurring in 1–2% of cases and is of the low–flow (ischemic) veno–occlusive type associated with hyperleukocytosis and leukostasis or hyper viscosity syndrome.

**Conclusion**: The aetiology of priapism in this case is CML. Priapism should be treated immediately and correctly to avoid any complication or sequel such as penile gangrene, which in this case require radical decision (Partial Penectomy) that will alter the patient’s quality of life.

**Keywords**: Priapism, CML, Fournier Gangrene, Penile Gangrene
Transanal omentum evisceration through a perforated rectal AAST grade II due to trans anal penetration injury: a case report

Ahmad Iffa M1, M Rizal Isburhan1,2, Bambang Am Am Setya Sulthana1,2,3
1Department of General Surgery, Dr. Slamet General Hospital, Garut, West Java, Indonesia
2Department of Surgery, Universitas Padjadjaran Bandung, Bandung, Indonesia
3Division of Digestive Surgery, Hasan Sadikin Hospital, Universitas Padjadjaran Bandung, Bandung, Indonesia

Background: Straight perforation occurs as a result of a complication under pathological conditions that compromise the rectal wall. In almost all reported cases of rectal injury associated with small intestinal evisceration, the small intestine is the most organ involved. Repair techniques are variable, from primary suture in minor injuries, to injured segment resection and colostomy for the most severe cases. We present a rare case of trans anal evisceration of the greater omentum after rectal injury of transanal penetrating injury.

Case Presentation: We report a 16 years old female suffering from trans anal omentum evisceration and periumbilical abdominal pain one hours after a motorcycle crash accident. She felt local tenderness at right lower quadrant. No Abdominal muscular resistance was observed on physical examination. A normal plain thorax and abdominal X ray. The patient underwent surgery six hours after the accident, intraoperatively, her omentum was sliding through and exiting through the anus. The omentum was sectioned and ligated, the perforated rectal was primary sutured and a diversion colostomy was performed. The cause of the rectal penetration was from a wood broom stick covered by her intact jeans pants that penetrate through anal canal due to a motorcycle crash accident.

Conclusion: The decision of the technique to be used will depend on the extent and other characteristics of the injury, the commitment of neighbouring structures, the time of evolution and the degree of contamination. The general surgeon should be prepared for the handling of these injuries as they are resolution in the emergency departments.

Keywords: Perforated Rectal, Omentum, Evisceration.

Traumatic pancreaticoduodenal injury: a case report

Dudy Kusmartono1, Bambang A.S. Sulthana1, Eka Surya Nugraha2, Nenny Agustanti2, Hikmat Permana3, Hasrayati Agustine3
1Division of Digestive Surgery, Department of Surgery, Hasan Universitas Padjadjaran, Bandung, Indonesia
2Department of Anaesthetic, Hasan Sadikin Hospital, Universitas Padjadjaran, Bandung, Indonesia
3Department of Radiology, Hasan Sadikin Hospital, Universitas Padjadjaran, Bandung, Indonesia

Background: Pancreaticoduodenal injuries, although relatively rare, have a significant morbidity (36–60%) and mortality (18–23%). The outcome depends on early diagnosis, which is essentially based on a high index of suspicion.

Case Presentation: A 50-year old male presented to the ER with abdominal pain for 2 days following an attack by a wild boar that had butted his abdomen. During surgery, we found transection of the duodenum pars II, and laceration of the head of pancreas with some bile presence. We also found leakage of pancreatic duct. We performed partial duodenectomy, pancreaticojejunostomy choledocojejunostomy, and gastrojejunostomy on the patient. Traumatic pancreaticoduodenal injury still remains challenging with high morbidity and mortality. The choice of surgical procedure depends on the degree and site of injury, and several surgical treatment options can be considered for the pancreaticoduodenal injury according to the severity of the injury and conditions of the patient. In our case, the patient came to hospital 3 days after blunt abdominal trauma, the patient was in stable conditions allowing us to choose partial resection of duodenum, then we closed the distal and proximal punctum separately using silk 3.0 suture, we performed pancreaticojejunostomy, choledocojejunostomy and gastrojejunostomy on the patient. Patient condition is improved after 2 weeks in hospital.

Conclusion: Traumatic pancreaticoduodenal injury is a rare case. It remains challenging with high morbidity and mortality. The choice of surgical procedure depends on the degree and site of injury, and several surgical treatment options can be considered for the pancreaticoduodenal injury according to the severity of the injury.

Keywords: Pancreaticoduodenal Injury, Pancreaticojejunostomy, Choledocoeyjunostomy,

Video-assisted thoracoscopic surgery in treatment of empyema: a case series

Christophoroes Jonathan Tansil1, Yustinus Rurie Wirawan2
1Dr. (H.C.) Ir. Soekarno General Hospital, Bangka Belitung, Indonesia
2Department of Surgery, Dr. (H.C.) Ir. Soekarno General Hospital, Bangka Belitung, Indonesia

Background: Empyema is a condition which can be treated depending on the etiology of the empyema and the phase of empyema development. Open thoracotomy surgery is a conventional technique that commonly used in empyema that has greater risk and longer post-operative hospital stay. This case series aims to evaluate the video-assisted thoracoscopic surgery in treatment of empyema.

Case Presentation: Video-Assisted Thoracoscopic Surgery (VATS) with minimal access surgery was done to shorten post-operative hospital stay and lower the risk during the surgery. We describe a case series of Empyema in five patients, each with a different presentation, clinical course, and outcome. All of our patients were performed VATS procedure under General Anaesthesia and evaluated for post-operative hospital stay and complication that occur after the surgery. Most of the patients experienced tolerable pain on the site of surgery and only need 3 – 4 days post-operation hospital stays after VATS before being discharged. There is only one patient with poor prognosis after VATS in this case series that caused the patient need to be admitted to Intensive Care Unit and using mechanical ventilator.

Conclusion: In this case series, VATS has a promising result for the patient and can become a choice of treatment for empyema.

Keywords: Video-Assisted Thoracoscopic Surgery, Empyema, Case Series
ABSTRACT

A 61 years-old male with giant bladder stone weighed almost 1000 grams: a case report

Rizky Aditya Fardhani1, Eriawan Agung Nugroho2

1General Surgery Resident, Faculty of Medicine, Universitas Diponegoro, dr. Kariadi General Hospital, Semarang, Indonesia
2Staff of Department of Urology, Faculty of Medicine, Universitas Diponegoro, dr. Kariadi General Hospital, Semarang, Indonesia

Background: A case report of very large bladder stone weighed almost 1000 grams is a very rare case with a history of urinary tract infection in the past 10 years and history of frequency and urgency urinary. This study aims to report a rare case about giant bladder stone and the successfully to removed the giant bladder stone with open cystolithotomy

Case Presentation: A 61 years-old male patient came to the hospital with complaints of reddish urination with dysuria, frequency, and urgency urinary. The patient’s often holds urination while on duty. The patient also has a history of high blood sugar but rarely take the medication. There was no history of trauma or lower urinary tract symptoms except frequency, urgency, and straining. The patient has a history of the last 10 years routinely by spending 20 cigarettes per day. When a bimanual examination done, there was the hard part. Then the patient was taken NCCT and obtained a picture of a compact opacity in the bladder. There are many techniques and modalities to remove the bladder stone. Considering of the size of the bladder stone in this patient, open cystolithotomy was the correct treatment. After remove the giant stone, we took a sample from bladder wall for examination of histopathology.

Conclusion: Bladder stone is the third most common affliction in urinary tract and associated with all conditions that can make urine static. The recurrence is high if without right follow up and medical intervention.

Keywords: Bladder Stone, Open Cystolithotomy, Rare Case

Single surgical approach for gastric gastrointestinal stromal tumour and cholecystolithiasis by laparoscopic procedure: Indonesian Journal of Cancer

Abdul Mughni1, Vito Mahendra Ekasaputra2,3, Siti Amarwati4

1Surgeon and Consultant of Digestive Surgery Lecturer of Surgery Department, Medical Faculty of Universitas Diponegoro, Semarang, Indonesia.
2Trainee of Digestive Surgery, Dr. Kariadi Central Hospital, Medical Faculty of Universitas Diponegoro, Semarang, Indonesia.
3Lecturer of Surgery Department, Medical Faculty of Universitas Islam Sultan Agung, Semarang, Indonesia.
4Department of Pathology Anatomy, Dr. Kariadi Central Hospital, Medical Faculty of Universitas Diponegoro, Semarang, Indonesia.

Background: Gastrointestinal stromal tumors (GISTs) are rare neoplasms. Although they represent only 0.1-3 % of all gastrointestinal (GI) malignancies, they account for 80 % of gastrointestinal neoplasms. The surgical principles for GISTS are include a R0 resection with a normal mucosa margin, without systemic lymph node dissection, avoidance of tumour perforation with cause peritoneal seeding which can make a poor outcome. The indication surgical resection for large GISTS performed conventionally through laparotomy. However, we decided to performed one approach surgery with minimal invasive laparoscopic partial gastrectomy by endoflex stapler with maximal preservation of remnant stomach and cholecystectomy to offer optimal personalized outcome.

Case Presentation: A 43-year-old male with chief complaint hematemesis and melena about 1 month, and colicky pain on right upper quadrant of abdominal with increased intensity for 2 months. From abdominal MSCT with contras revealed a solid exophytic mass on gastric fundus, with 4.6 x 4 x 5.6 cm in size, with 0,5 cm gall bladder stone. Laparoscopic partial gastrectomy and cholecystectomy was performed in single minimal invasive surgical procedure. The post-operative period was uneventful, with minimum pain patient could mobilized early, with better tolerance for liquid diet and within 3rd day post-operative patient could tolerate for porridge diet. Patient was discharged on day 4 after the surgery. According to histopathologic result revealed a malignant mesenchymal tumour as according to GISTS with a tumour free margin of resection.

Conclusions: Laparoscopic partial gastrectomy can be maintained for 4 – 5 cm large of tumour, with a simple partial gastric resection technique with echelon flex™ (Ethicon) stapler are used for GISTS in gastric fundus with maximal preservation of stomach.

Keywords: Gastrointestinal Stromal Tumour, Laparoscopic Partial Gastrectomy
Risk factors that contribute to the occurrence of surgical wound infections in patients post appendectomy in RSUP Sanglah

Danny Zefanya Mooy, I Gede Suwedagatha, Nyoman Golden
General Surgery, Universitas Udayana, Bali, Indonesia

Background: Surgical wound infection (SWI) is one of the three most common hospital-acquired infections, with an average of 14-16% and which is the most common infection in postoperative patients. This study aims to look for factors associated with post-operative wound infection in the appendectomy procedure at Sanglah General Hospital Denpasar.

Methods: This study used a retrospective cohort design, which was carried out at the Medical Record Installation Sanglah General Hospital Denpasar, Bali, Indonesia during the January 2017 to September 2018. Data analysis used chi-square tests, relative risk calculations, and logistic regression.

Results: This study used 108 respondents, and there were 17 people who experienced SWI, the final analysis using logistic regression showed a diagnosis of perforated appendicitis (RR: 9.57; 95% CI: 2.09-43.64; p = 0.004) and operator guidance resident (RR: 1.75; 95% CI: 1.49-22.3; p = 0.011) is a risk factor for the occurrence of the SWI.

Conclusion: The diagnosis of perforated appendicitis is the most important factor in the occurrence of surgical wound infection after appendectomy.

Keywords: Infection, Risk Factors, Characteristics, Surgery

Preoperative and intraoperative prognostic factors of morbidity prolonged ventilator and length of stay intensive care unit in postoperative double valve replacement in Dr. Sardjito Hospital

Ade Anugerah, Supomo
Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

Background: Valvular heart disease is a heart disease that requires surgical intervention as definitive management. Double Valve Replacement (DVR) surgery is a complicated surgical procedure and has a high mortality rate. Early identification of preoperative and intraoperative factors is useful in preventing post-operative morbidity and mortality. This study aims to determine the preoperative and intraoperative prognostic factors that influence the morbidity of prolonged ventilator use and length of stay intensive care unit (ICU) after DVR surgery.

Methods: A retrospective cohort observational study was conducted in patients who underwent DVR surgery at Dr. Sardjito General Hospital during January 2013 - July 2020. Chi-square, Fisher’s exact tests, and Independent T test, variable with p<0.25, and followed by multivariate logistic regression analysis with backward method were used to identify factors contributing to morbidity of prolonged ventilator and length of stay ICU.

Results: A total of 42 subjects were included in this study. Seventeen (40.4%) patients experienced prolonged duration ventilator and length of stay ICU. Bivariate analysis showed that NYHA III heart failure (p=0.043; RR 1.50; 95% CI 1.25-2.01) was at risk for prolonged duration ventilator. Bivariate analysis showed that the left ventricular ejection fraction (LVEF), pulmonary hypertension and active endocarditis were all risk factors of prolonged length of stay ICU, but only the LVEF < 55% (p=0.043; RR 4.31; IK 95% 1.18-15.70) were significant prognostic factor for prolonged length of stay ICU.

Conclusion: NYHA III heart failure is a prognostic factor for the morbidity of prolonged duration ventilator. Left ventricular ejection fraction <55% were significant prognostic factor of prolonged length of stay ICU in postoperative DVR patients.

Keywords: Heart Valve Disease, Double Valve Replacement, Prognostic Factors, Length of Stay, Intensive Care Units.

No. 43 (Dian Azhary Sibuea)

Thoracic Trauma Severity Score (TTSS) as an outcome predictor of blunt thoracic injury patients in H. Adam Malik Medan Hospital

Dian Azhary Sibuea, Doddy Prabisma Pohan, Marshal
Department of Surgery, H. Adam Malik General Hospital, Medan, Indonesia

Background: Trauma is one of the biggest causes of death in the world. In thoracic trauma, 90% is blunt trauma and 10% of them require surgery. Mortality rates can be prevented by establishing a diagnosis and good measures. Thoracic Trauma Severity Score (TTSS) can be used to assess the severity of patients with thoracic trauma both anatomically and physiologically. TTSS can help predict advanced complications and provide early management of thoracic trauma patients. The purpose of this study was to determine the relationship between the assessment of TTSS trauma scores and outcomes on thoracic trauma at H. Adam Malik Medan Hospital.

Methods: This study is a correlative analytic study with a cross sectional study design conducted at H. Adam Malik Medan Hospital. The main results in the form of the relationship of TTSS scores with Karnofsky scores were analyzed using the Spearman correlation test. Other results relate to the comparison of TTSS value categories with patient characteristics and outcomes with the Chi-square test.

Results: In this study, 20 study samples were obtained, with an average age of 51.15 (± 14.47) years, consisting of 14 men (70.0%) and 6 women (30.0%). The patient’s condition was classified into two conditions, namely 13 patients (65.0%) good condition and 7 patients (35.0%) in poor condition. The correlation coefficient between the TTSS score with Karnofsky score is 0.794 and the p value <0.001 or shows statistically significant results.

Conclusion: Based on the results of the study, it was found that there was a significant correlation between the assessment of TTSS trauma scores with poor outcomes in the thoracic trauma (p <0.001)

Keywords: Thoracic Trauma Severity Score, Outcome, Predictor, Blunt Thoracic Injury
Overview of post laparotomy patients with wound dehiscence at Dr. Mohammad Hoesin General Hospital from January–December 2019

Octiara Gisca Amelia, M. Hafidh Komar
Department of Surgery, Faculty of Medicine, Universitas Sriwijaya, Dr. Mohammad Hoesin General Hospital, Palembang, Indonesia

Background: Wound dehiscence is a post-operative complication defined as separation of the abdominal musculo-aponeurosis after a surgery. The incidence varies between 0.4% until 3.5%. This contributes to morbidity and mortality post-surgery and implicates financial costs upon the patient and health provider. There are two category of factors that contribute to wound dehiscence. The first is patient related, which includes age, gender, and comorbidity. The second is related to the surgery itself, which includes indication of the surgery, type of suture used, or technique. Knowing these factors help greatly in predicting and preventing wound dehiscence, thus improving the post-operative complication and decrease the morbidity and mortality of the patient.

Methods: A retrospective-descriptive study was done on patients who had post laparotomy wound dehiscence in Dr. Mohammad Hoesin General Hospital Palembang. The study used data from the patient’s medical records, and includes those who were admitted from January 1st 2019 to December 31st 2019. Samples used were only those who fit the inclusion criteria – which are willingness to participate in the study and have a complete medical record for variables examined in the study. Factors that are examined include age, gender, type of operation, albumin levels, and comorbidity (diabetes mellitus). Wound dehiscence is defined as reopening of abdominal incision, marked by separation of the abdominal walls including fascia.

Results: Twenty-six patients who were admitted under the subdivision of digestive surgery and had complete medical records were enrolled in this study. The mean age of the patients is 48 years old, with the youngest being 23 years old and the oldest 71 years old. Eighteen patients are male, and most of the patients had emergency laparotomy (17 people). Twenty of them had hypoalbuminemia, and only three had diabetes mellitus.

Conclusion: Factors that are present in post-laparotomy patients who had wound dehiscence at Dr. Mohammad Hoesin General Hospital Palembang are male sex, underwent an emergency laparotomy, hypoalbuminemia, and without history of diabetes mellitus. Mean age of patients in this study is 48 years old.

Keywords: Wound Dehiscence, Laparotomy, Surgical Complications

A case report of penetrating abdominal gunshot injury

Reinaldo Cendana, Pavita Musi Sartika Hutauruk, Natalie Beatrice Horasia, Aslesa Wangpathi Pagehgori
Department of General Surgery, Regional Public Hospital of Waikabubak, West Sumba Regency, East Nusa Tenggara, Indonesia

Background: Out of all trauma cases, the incidence rate of gunshot injury was only 3.2%, with the percentage of abdominal gunshot injury ranged from 12-16%. The low incidence rate of gunshot cases, inevitably led practitioners into the lack of experience to the management of the abdominal gunshot injury. We believe that early diagnosis and efficient treatment in abdominal gunshot injury is important to optimize the outcome of the patient.

Case Presentation: We report a case of a 32-years-old Indonesian male with abdominal gunshot injury, with the entry wound in the left flank area and the exit wound in the left upper quadrant of the abdomen. During exploration laparotomy, active bleeding was found from the mesentery and mesocolon, accompanied with rupture of ileum and retroperitoneal in the zone 2. Repair and gut anastomoses with blood vessel (mesentery) ligation were done during the procedure.

Conclusion: Conservative management was chosen for the retroperitoneal hematoma. Patient was discharged with stable condition on the seventh day of post-operative care.

Keywords: Gunshot, Abdominal Injury, Penetrating Injury, Laparotomy Exploration

ICAM-1 in case suspected COVID-19 surgery patients

Jacob Pajan1, Mendy Hatibie Oley2
1General surgery Resident, Surgery Department, Kandou Hospital, Manado, Indonesia
2Head of Plastic Division, Surgery Department, Kandou Hospital, Manado, Indonesia

Background: COVID-19 causes a systemic inflammatory response, involving dysregulation and misexpression of many inflammatory cytokines. The recruitment and activation of inflammatory cells depend on the expression of many classes of inflammatory mediators increased expression of endothelial cell adhesion molecules is related to COVID-19 disease severity. WHO recently update the case definition to suspect case, probable and confirmed of COVID-19. This study aims to measure mean value of ICAM-1 and Its Relation to Suspected COVID-19 disease.

Methods: All suspected patient (n:20) were hospitalized and treated with Indonesian National Guidelines of COVID-19 management. The ICAM-1 were taken on day 1 and day 7, demographic data were recorded and the routine blood count value were taken into the description.

Results: Of all the samples analyzed, the demographic data were the mean age 53 (22-75), 15 men and 5 women. Median ICAM-1 in one of the 22-year-old SR samples Results of the first reading at hospital admission (abs) 0.325 with the first ICAM-1 level 142.34 ng / ml compared with the second reading after treatment 1 week later range (abs) 0.347 with ICAM levels -1 152.75 was the lowest value with confirmed non-reactive SARS-CoV-2 examination, then the NH sample aged 55 years had the first reading on admission (abs) 0.765 with the first ICAM-1 level 350.62 ng / ml compared to the second reading after treatment 1 week later (abs) 0.752 with ICAM-1 levels 344.47 is the highest value and has a comorbid Malnutrition with confirmed SARS-CoV-2 Reactive examination, then a 60-year-oldBF sample first reading on admission (abs) 0.473 with ICAM levels First -1 195.36 ng/ml compared with the second reading after treatment 1 week later (abs) 0.417 with an ICAM-1 level of 185.89 being the mean and confirmed SARS-CoV-2 Reactive sensation. Of the 20 samples examined there were 4 confirmed samples of Reactive Cov-2 SARS examination. Here there was an increase in ICAM-1 status in the sample of trauma patients who were confirmed to be tested for Cov-2 Reactive SARS. From 20samples of ICAM-1 examination (median: 284.82 vs 265.42 ng / ml), the mean ICAM-1 results on the first day of collection were 271.33 ng / ml and on the seventh day 253.91 ng / ml, and in patients who were confirmed positive (n: 4) there was a
mean 290.54 ng/ml on examination day 1 and 309.25 ng/ml on the 7th day.

**Conclusion:** The Mean of ICAM in Suspected case of COVID-19. There is no correlation between ICAM-1 and GCS in both sepsis. There was negative correlation between S100B and GCS on 3rd day of sepsis. No correlation between ICAM-1 and S100B on both measurement days.

**Keywords:** ICAM-1, COVID-19, Surgery Patients

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**A rare case of isolated duodenal injury after blunt abdominal trauma by bicycle handlebar**

I Gusti Agung Gede Darma Putra Suryapranata¹, I Gede Suwedagatha²

¹Resident of General Surgery Department, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Denpasar, Indonesia
²Lecturer of General Surgery and Trauma Department, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Denpasar, Indonesia

**Background:** Isolated duodenal trauma remains rare diagnosis among pediatric population. diagnosis of blunt duodenal trauma was complicated due to organ location and subtle clinical finding on the pediatric patients. Delayed management lead to the high morbidity and mortality. Which related to duodenal dehiscence, uncontrolled sepsis, and multiple organ dysfunction syndrome.

**Case Presentation:** This study report a 10-year-old unconscious patient came to the emergency room after falling off his bicycle and hit by a bicycle handlebar 24 hour prior to admission. From vital sign, patient with septic shock condition, nonpalpable pulse and nonleisure blood pressure. Physical examination found handlebar bicycle like bruise on the right upper quadrant region and distended abdomen. There was abdominal defence on palpation. On early circumstance patient diagnosed with abdominal blunt injury with rupture on the solid organ differential diagnose with hollow organ rupture. Operative laparotomy finding, there was only hematoma at white line of told right mesentery viscera land Kochers maneuver performed. Perforation seen 30% duodenum part III at the posterior wall. The defect repaired by duodenoraphy, primary suture double layer. Moreover, damage treated by covering affected areas with omentum. Postoperative period was uneventful and patient discharged after 11 days of stay with oral take.

**Conclusion:** Duodenal rupture incidences are rare. However, it is not uncommon in children since their active state may possibly cause many injuries leading to this condition. Immediate stabilization and transfer to the appropriate trauma Centerville result in greatly improved outcomes.

**Keywords:** Abdominal Trauma, Bicycle Handlebar, Duodenal Rupture, Duodenorrhaphy

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**Association between thiamine concentrations with lactate levels and SOFA score in peritonitis patients with sepsis**

Maria Meilita¹, Vicky Sumarki², Jusak Nugraha²

¹Training Program in Surgery, Faculty of Medicine, Universitas Airlangga, dr. Soeotomo General Hospital, Surabaya, Indonesia
²Digestive Surgery Division of Surgery Department, Faculty of Medicine, Universitas Airlangga, dr. Soeotomo General Hospital, Surabaya, Indonesia

**Background:** Thiamine is an essential vitamin for mitochondrial, acts as a cofactor of the pyruvate dehydrogenase complex, which transforms pyruvate into acetyl-CoA for entry to the Krebs cycle. Considering acute consumption of thiamine in the hypermetabolism state and mitochondrial dysfunction, we expected that lactic acidosis and severity of illness in sepsis would be affected by thiamine deficiency.

**Objective:** To investigate our hypothesis that low thiamine concentrations are correlated with higher lactate levels and SOFA score in septic patients.

**Methods:** Prospective observational study in 65 adult septic patients who presented with peritonitis on admission and underwent abdominal surgery. Whole blood thiamine concentrations assessed on admission, days 3 and 5. The primary outcomes were lactate levels and SOFA score. Age, septic shock, malnutrition and mortality were the secondary outcomes.

**Results:** Thiamine deficiency was detected in 29 patients on admission and an additional 4 patients developed it within 72 hours. Thiamine was significantly negatively correlated with lactate levels (r = -0.6; P = .02) and SOFA score (r = -0.8; P = .00). The relationship held after multivariable regression analysis controlling for sex, septic shock, and malnutrition. There was a significant association between mean blood thiamine concentrations with malnutrition (P = .041) and mortality (P = .00). However, in regression logistic analysis, there were no association between malnutrition and risk of mortality (OR: 2.47; 95% CI: 0.84-7.26; P = .096).

**Conclusion:** There were a negative correlation between thiamine concentrations with lactate level and SOFA score in peritonitis patients with sepsis.

**Keywords:** Thiamine, Thiamine Deficiency, Sepsis, Lactate, Lactic Acidosis, SOFA score

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**Brachiocephalic artery rupture on thoracic stab wound in a 9-year old child**

Meirisa Ardianti¹, Prima Kharisma Hayuningrat²

¹Resident of Surgery, Faculty of Medicine, Universitas Sebelas Maret, Dr. Moewardi General Hospital, Surakarta, Indonesia
²Division of Thoracic Cardiac and Vascular Surgery, Department of Surgery, Faculty of Medicine, Universitas Sebelas Maret, Dr. Moewardi General Hospital, Surakarta, Indonesia

**Background:** Chest trauma is the second most common trauma with a high mortality rate. Stab wound is one of the etiologies of chest trauma. It is a penetrative wound caused by a sharp object. In the case of stab wound in the chest region, we assess the possible occurrence of major vascular injuries.

**Case Presentation:** We present a case of a stab wound in a 9-year old child, caused by a fishing arrow accidentally stubbed in suprasternal notch with stable hemodynamic. CT scan on the patient showed the fishing arrow projection at suprasternal notch extend to right hemithorax with the tip was near posterior wall of brachiocephalic artery. We did sternotomy exploration on the patient as well as preservation of the proximal brachiocephalic artery, sub-clavian artery and common carotid artery. We found that the fishing arrow was stuck in the posterior of brachiocephalic truncus and, specifically at suprasternal notch extend to right hemithorax. We also found a 0.5 cm rupture on the brachiocephalic truncus on the posterior, causing the rupture of the
Diagnostic value of trauma and injury severity score in predicting mortality of multi-trauma patients in Sanglah Hospital

Ivan H Hadisaputra, Gede Suwedagatha, Tjokorda Gde Bagus Mahadewa
Department of Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital

Background: Trauma is one of the leading causes of morbidity and mortality throughout the world. The economic burden caused by trauma is quite significant. It is estimated that trauma resulted in a loss of life 26% cases, and more than half is in productive age. TRISS is an internationally-qualified mortality predictor and has been used in many health facilities throughout the world. Hospitals that provide good trauma patients care are associated with good prognosis and low mortality.

Patients and Methods: This study is a diagnostic test to determine the accuracy of TRISS scores to predict mortality of multi-trauma patients treated in Sanglah General Hospital.

Results: Fifty-two multi-trauma patients with ISS score >18 with at least two body regions being injured were enrolled in this study. The TRISS showed 81.8% sensitivity, 97.6% specificity, 90% positive predictive value, 95.2% negative predictive value, 21% prevalence, and 94.2% accuracy.

Conclusion: Multi-trauma patients in Sanglah Hospital showed good results according to the TRISS scoring prognostic indicator system.

Keywords: Multi Trauma, RTS, ISS, TRISS.

Effect of glutathione administration as adjuvant therapy to NO and MDA level in Wistar rat peritonitis model

Ivani Yunita Korwa, Mulfitihatul Muniroh, Tri Nur Kristina, Agung Aji Prasetyo, Endang Mahati
1General Surgery Department, Faculty of Medicine, Universitas Diponegoro, Semarang, Indonesia
2Physiology Department, Faculty of Medicine, Universitas Diponegoro, Semarang, Indonesia
3Clinical Microbiology Department, Faculty of Medicine, Universitas Diponegoro, Semarang, Indonesia
4Pediatric Surgery Department, Faculty of Medicine, Universitas Diponegoro, Semarang, Indonesia
5Pharmacology Department, Faculty of Medicine, Universitas Diponegoro, Semarang, Indonesia

Background: Excessive amounts of free radicals beyond the antioxidant levels in the body will cause a condition which is called oxidative stress. Nitric oxide (NO) and MDA are produced under conditions of oxidative stress. Glutathione (GSH) is the most endogenous antioxidant synthesized in humans. Therefore this study aims to prove whether the administration of Glutathione as an adjuvant therapy can reduce levels of NO and MDA in peritonitis.

Methods: This is an experimental study with a post-test only control group design. Twenty-four Wistar rat were randomly divided into 4 groups (6 rats/group). The first group (C) was a control group, the second group (P) was induced by peritonitis, the third group (P+Cef) was peritonitis-induced groups, given Ceftriaxone injection as therapy, and the fourth group (P+Cef+Glu) was peritonitis-induced groups, given Ceftriaxone injection and Glutathione as adjuvant therapy. After 24 hours, blood samples were taken for examination of NO and MDA levels. Data is considered significant if the p value <0.05.

Results: There was significant increase of NO level from Group 2 to Group 4 (P<0.05). However, there was no significant differences between MDA levels groups (P>0.05).

Conclusion: Glutathione as adjuvant therapy is not effective to reduce NO and MDA levels in peritonitis.

Keywords: Glutathione, Peritonitis, NO, MDA.
ABSTRACT

A patient 60 years old, female, presented with chief complaint of generalized abdominal pain, physical examination showed muscle guarding and decreased peristaltic movement. The patient underwent exploratory laparotomy. Intraoperatively, we found perforation at the first antemesenterial quarter of duodenum with diameter of 1x0.5cm. Then damage control surgery was performed by primary closure of duodenum by omental patch, followed by gastrojejunostomy, drainage and biopsy. After 25 post-operative days the patient deceased due to pneumonia.

Conclusion: Gastrointestinal metastases are possible, even uncommon, and must be considered in patients with a history of breast cancer especially in patients without further treatment after surgery.

Keywords: Duodenum Perforation, Metastatic Breast Cancer, Peritonitis

Spontaneous tuberculosis associated tension pneumothorax: a case report in rural hospital

Fuad Iqbal Elka Putra
Faculty of Medicine, Universitas Lampung, Lampung, Indonesia

Background: Secondary spontaneous pneumothorax (SSP) is one of the major complications of pulmonary tuberculosis (TB), and it can be a life-threatening condition if it progresses to tension pneumothorax. This case study aims to evaluate the spontaneous tuberculosis associated tension pneumothorax.

Case Presentation: A man 65 years old from Sumedang with clinical manifestation shortness of breath with a history of pulmonary TB for 2 months, and he was a smoker. Physical examination was found tachycardia (120 bpm), tachypnoea (36x/min), BP130/80, oximetry 95 to 99% via nasal canula 4 L/min, trachea deviation to the right side, decreased breath sound on the left hemithorax, hyper-sonor in left hemithorax. Patients Chest X-Ray after 10 hours from admission showed mediastinum shift away from the pneumothorax in tension pneumothorax, tracheal deviation to the contralateral side of tension pneumothorax. Our patient was unique because since the patient had pulmonary tb with “low drug adherence”, minimal examination and delayed significant intervention during admission. The patient had started to show decreased consciousness, shock, seer shortness of breath before procedure. Four hours before procedure Chest X-Ray was obtained and showed tension pneumothorax. When a patient is hemodynamically stable, radiographic evaluation is recommended. The initial assessment is with a chest radiograph (CXR) to confirm the diagnosis.

Conclusion: The reported clinical presentation of tension pneumothorax depends on the ventilatory status of the patient (symptoms, vital signs, neck and chest examination findings, respiratory arrest and cardiac arrest).

Keywords: Tuberculosis, Tension Pneumothorax, Rural Hospital

General peritonitis due to duodenal perforation as a result of metastatic breast cancer

Ariane Yudhianti1, Slamet Rahardja2, A. Yuda Handaya3
1General Surgery Residency, Sardjito Central General Hospital, Yogyakarta, Indonesia
2Digestive Surgery Fellowship Programme, Sub-Division of Digestive Surgery, Sardjito Central General Hospital, Yogyakarta, Indonesia
3Sub-Division of Digestive Surgery, Sardjito Central General Hospital, Yogyakarta, Indonesia

Background: General peritonitis due to duodenal perforation as a result of metastatic breast cancer metastatic is an extremely rare case. Only 10% of all metastatic breast cancer cases involve the gastrointestinal system. The most common organs of gastrointestinal metastasis of breast cancer are the stomach, colon and rectum. This study aims to report the duodenum involvement from breast cancer which presented to the emergency room with a diagnosis of general peritonitis suspected to hollow viscus organ perforation.

Case Presentation: A patient 60 years old, female, presented with chief complain of generalized abdominal pain, physical examination showed muscle guarding and decreased peristaltic movement. The patient underwent exploratory laparotomy. Intraoperatively, we found perforation at the first antemesenterial quarter of duodenum with diameter of 1x0.5cm. Then damage control surgery was performed by primary closure of duodenum by omental patch, followed by gastrojejunostomy, drainage and biopsy. After 25 post-operative days the patient deceased due to pneumonia.

Conclusion: Gastrointestinal metastases are possible, even uncommon, and must be considered in patients with a history of breast cancer especially in patients without further treatment after surgery.

Keywords: Duodenum Perforation, Metastatic Breast Cancer, Peritonitis

Multiple penetrating trauma: lung and wrist injury caused by violent robbery in Indonesia

M Mariando Satria Pangestu Catur1, Franky Yesaya Siahaan2, Nurman Effendi3, Tri Wisesa Soetisna1
1Division of Adult Cardiac Surgery, National Cardiovascular Centre Harapan Kita Hospital, Jakarta, Indonesia
2Division of Cardiothoracic Vascular Surgery, Department of Surgery, EMC Hospital, Tangerang, Indonesia
3Division of Orthopaedic Surgery, Department of Surgery, EMC Hospital, Tangerang, Indonesia

Background: Incidence of robbery with violence in Indonesia remains high. Management of multiple trauma including thoracic and vascular penetration, is a major problem in the emergency department. In this case, we report a patient, who can be considered very lucky, due to the trauma mechanism and prompt delivery to our hospital for initial management.

Case Presentation: A 17-year-old man was admitted to our hospital's emergency department after having a sharp trauma in the right anterior thorax region. There was an expulsion right lung lobe. Rib fractures 3 and 4 were found. The patient had a laceration on the left wrist causing vascular and nerve injury. The patient underwent emergency surgery by a cardiothoracic surgeon and orthopaedic surgeon. Superior and media part of right lung lobe were lacerated on intraoperative findings. Median nerve, ulna nerve, and some large arteries in the left hand had been damaged. The patient was stable after surgery and transferred to in-patient ward. He was discharged after a full recovery on seventh day of treatment.

Conclusion: Initial management of patients with sharp trauma, should be given early resuscitation to stabilize hemodynamic. Our patient was fortunate to have no severe thoracic pathology, no neurological deficits of the hand, and no secondary trauma during transport to the emergency department.

Keywords: Sharp trauma, thoracic trauma, vascular trauma.
Effect of 5% povidone iodine irrigation compared to 0.9% NaCl in the laparotomy appendectomy subcutis tissue wound and the rate of surgical site infection in perforated appendicitis patients at Dr. Soetomo General Hospital

Vicky Sumarki Budipramana¹, Tomy Lesmana¹, Albert Yara Limanago²
¹General Surgery Department, Medical Faculty, Universitas Airlangga, Soetomo General Hospital, Surabaya, Indonesia
²Resident of General Surgery, Medical Faculty, Universitas Airlangga, Soetomo General Hospital, Surabaya, Indonesia

Background: The incidence of surgical site infection in appendectomy laparotomy is around 9 - 53%, mainly superficial incisional. Surgical wound irrigation is often done using povidone iodine. However, there is a controversy related to this because the use of povidone iodine in preventing infection of the surgical site in wound infections, is not better than normal saline.

Methods: This study is an experimental research design with a randomized control trial clinically controlled trial (RCT-CCT) study using perforated appendicitis patients over 18 years who come to Dr. Soetomo General Hospital.

Results: In this study found 30 research subjects consisting of 23 males (76.7%) and 7 females (23.3%). Patients were obtained between the ages of 18 to 59 years with an average age of 33.5±13.449 years. Obtained wound healing time varies, between 14 to 17 days, with an average of 14.30 days + 0.915. There was no significant difference between irrigation with 0.9% NaCl and 5% povidone iodine (p=0.543). In the group given 0.9% NaCl alone there were 2 patients who get pus or wound dehiscence (13.3%) and 13 patients who did not get it (86.7%). In the group given Povidone Iodine 5%, there were 1 patient who got pus or wound dehiscence (6.7%) and 14 patients who did not get it (93.3%).

Conclusion: In this study it can be concluded that there was no significant difference between irrigation with NaCl 0.9% and povidone iodine 5% in the subcutaneous tissue of surgical wounds to the rate of surgical site infections in patients with postoperative surgery of perforated appendicitis. Povidone iodine 5% does not reduce or increase the incidence of surgical site infections.

Keywords: Surgical Site Infection, Perforated Appendicitis, Povidone Iodine, NaCl

The role of focused assessment with sonography for trauma after blunt abdominal trauma in children with stable hemodynamics: case series

Muhamad Muamar¹, Suwardi²
¹General Surgery Resident, Faculty of Medicine, Universitas Sebelas Maret, Dr. Moewardi General Hospital, Surakarta, Indonesia
²Pediatric Surgery Division, Faculty of Medicine, Universitas Sebelas Maret, Dr. Moewardi General Hospital, Surakarta, Indonesia

Background: Blunt Abdominal Trauma (BAT) is the most common cause of abdominal trauma in children. The most common mechanism of trauma is falling down and traffic accidents. CT scan examination is the gold standard for identifying BAT. However, this examination has many limitations, especially for the cost, availability and exposure to radiation. FAST plays a role in identifying intraabdominal free fluid in BAT cases.

Case Presentation: In this case series, there were three pediatric patients who experienced BAT with stable hemodynamics. All three patients were under 17 years of age, all patients complained of abdominal pain after a traffic accident. All three patients were FAST positive, and contrast CT scan of the abdomen showed a splenic rupture and one case of splenic rupture and liver rupture. All patients were hemodynamically stable and treated conservatively (without surgery) with symptomatic drugs. All patients showed good results, and went home without surgery.

Conclusion: In this case with stable hemodynamics, both FAST and CT scans do not change therapeutic management, that is conservative management. Therefore, FAST can be a cheaper examination option and can reduce radiation exposure, thereby reducing the risk of malignancy in children in the future.

Keywords: Blunt Abdominal Trauma, Children, Sonography, FAST

The microbial pattern of complicated intra-abdominal infections community in H. Adam Malik General Hospital Medan

Heri Gunanti Surbakti, Safruddin Nasution, Liberti Sirait
Surgery Department, Haji Adam Malik General Hospital, Medan, Indonesia

Background: The principles management of complicated intra-abdominal infections are source control and antibiotic therapy. The main problem in its implementation is the slow handling time and inadequate antibiotic therapy, which leads in an increase in mortality in complicated intra-abdominal infections. Early empirical antibiotics are based on the pathological location and community microbial pattern. This study is aimed to evaluate microbial pattern at H. Adam Malik General Hospital between January 2017 and October 2019.

Methods: This is a retro-prospective observational descriptive study.

Results: There were 37 patients who met the inclusion criteria. The most common microbial pattern in this study was gram-negative bacteria, which was 62.1%. The most common gram-negative bacteria found were E. coli (32.4%), followed by Klebsiella pneumonia (24.3%). While the most common gram-positive bacteria found was Staphylococcus haemolyticus (8.1%).

Conclusion: The most common microbial pattern found in this study was gram-negative bacteria, where the most common gram-negative bacteria was E. coli. The most common gram-positive bacteria were Staphylococcus haemolyticus.

Keywords: Intraabdominal infection, microbial pattern, antibiotic, resistance.

Tension gastrothorax following isolated blunt traumatic diaphragmatic injury with delayed presentation: a case report

Ivor Wiguna Hartanto Wilopo¹, I Wayan Periadijaya²
¹Department of Surgery, School of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia
²Department of Trauma Surgery, School of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia

Background: Traumatic diaphragmatic rupture is a rare reported case occurs
in patients with major blunt trauma. Accumulation of gastric contents such as air, fluid and foods in the thoracic cavity raise intrathoracic pressure can cause progressive mediastinal shift that can lead to respiratory failure, obstructive shock, and cardiac arrest, much like a tension pneumothorax. This condition was known as Tension Gastrothorax. This report presents a case of tension gastrothorax complicating blunt traumatic diaphragmatic rupture with life-threatening condition salvaged by nasogastric tube insertion followed by exploratory laparotomy and defect repair.

**Case Presentation:** A 23-year-old male presented to the surgical emergency department following a motor vehicle accident. The primary survey revealed slight shortness of breath with acceptable peripheral oxygen saturation. On further examination of the thorax region, the left chest bulge asymmetrically with asymmetrical chest wall motion. Auscultation of the left chest exhibit diminishing vesicular breath sound. Bowel sound was also found. Chest x-ray study showed marked elevation of the left diaphragm, with marked lining of the visceral organ wall on the 5th intercostal space intermixed diffuse air densities, compressed atelectatic lung in the left apex, and rightward shift of the mediastinum. Emergency exploratory laparotomy was done to reduce the herniated bowel content and alleviate the tension gastrothorax. Intraoperative examination reveal a 4x6 cm defect was found on posteromedial part of the diaphragm. Repair of the defect was done by continuous stitching of the diaphragm muscle using Non Absorbable Multifilament size 0.

**Conclusion:** Prevalence rate of traumatic diaphragmatic rupture is presents in less than 0.5% of all trauma cases. This injury happens too infrequently to undertake randomized controlled trials to develop level-one evidence. More research is needed to provide surgeons with evidence-based standardized methods for dealing with this rare pathology to ensure optimal patient outcomes.

**Keywords:** Traumatic Diaphragmatic Rupture, Blunt Injury, Tension Gastrothorax

Retained foreign body lead to recurrent foot abscess: improper handling case

**Krishna Murprayana**, **Hendry Irawan**, **Putu Anda Tusta Adiputra**

1. General Practitioner at Denpasar, Bali, Indonesia
2. General Surgeon at Denpasar, Bali, Indonesia
3. General Surgeon and Surgical Oncologist Consultant at Denpasar, Bali, Indonesia

**Background:** Foot abscess is still a difficult problem to treat because the underlying causes of infection in the extremities are very complex and varied. Abscesses that occur as a result of trauma are usually caused by foreign body contamination, bacterial colonization, or both. We report a case with multiple surgery on left plantar foot.

**Case Presentation:** This is a case report of a 30 years old male patient who complaint about recurrent pain and swelling of his left plantar foot. His plantar foot stepped on a coral in January 2020 and was taken to a hospital at Lombok Island for coral removal. After first surgery, his plantar foot was redness and abscess. A similar condition was occurred and the surgery were done until six times due to the same complaint. No foot radiograph was performed after first surgery. When he came to private hospital at Bali in September 2020, there was a sign of abscess on his left plantar foot with scar of previous surgery. He performed a radiograph of the left foot then the foreign body was found. It was suspected residual coral after first surgery. Then an exploration surgery was performed with C-Arm guidance. A piece of coral was found and extracted, then the wound was debrided.

**Conclusion:** A complete history of the patient is required in cases of an abscess to determine the possibility of residual foreign bodies and the radiological examination should be considered. Foreign bodies need to be removed to prevent recurrent abscess.

**Keywords:** Recurrent Abscess, Coral, Foreign Body, Improper Handling

Length of stay, complication, and mortality rate of peritonitis patients in Saiful Anwar Hospital Malang January 2019–December 2019

**Moh. Akbar Eska Putra**, **Aries Budianto**

1. Surgery Resident of Saiful Anwar General Hospital, Faculty of Medicine, Universitas Brawijaya, Malang, Indonesia
2. Digestive Surgery Department of Saiful Anwar General Hospital Malang, Faculty of Medicine, Universitas Brawijaya, Malang, Indonesia

**Background:** Peritonitis, globally is the most common abdominal emergency in the emergency room and has contributed to the mortality rate for about 20% of the world’s population. In Indonesia, based on data from the Ministry of Health in 2007, shows that the incidence of peritonitis is still high, namely around 7% of the population. This is strongly influenced by complications, severity and patient management procedures that make it necessary to collect data on the epidemiology of peritonitis cases. The research aimed are to find out the complications experienced in peritonitis patients, surgery procedure performed on peritonitis patients, the duration of treatment and Mortality Rate in patients with peritonitis.

**Methods:** This research is a descriptive study using secondary data from medical record of peritonitis patients in Saiful Anwar General Hospital in Malang period January 2019–December 2019. The data were obtained from 295 peritonitis patients. The number of male patients dominate the woman with the value of P<0.05.

**Results:** The results showed that the most common cause of this case was appendicitis perforation with 62 cases (27.55%) due to sepsis as the most complication. The length of stay was 4-7 days with a total of 105 patients (46.66%) and treatment management was exploratory laparotomy, excision and appendectomy for 62 treatments (27.55%). The mortality rate in patients reached 59 patients (26.33%).

**Conclusion:** Thus, it can be concluded that the most complications in peritonitis patients is sepsis with a length of stay of 4-7 days and the percentage of patient mortality reaches 26.33%.

**Keywords:** Complication of Peritonitis, Mortality Rate, Peritonitis
Gastro-Intestinal Surgery

Delayed presentation of traumatic abdominal hernia: a case presentation and literature review

Stacia Novia Marta, Fajar Mahendra, Ngakan Gede Dwija Hermawan, Oka Pertama, Nyoman Dwi Aussie Hary Mastika
Department of General Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia

Background: Traumatic abdominal hernia is a rare type amongst abdominal hernias. It is usually apparent following a direct blunt trauma which can be present within the immediate post-trauma period but some cases it has been reported as a delayed presentation.

Case Presentation: A 37-year-old man came to the outpatient clinic with a main complaint of abdominal pain and bulging in the right upper abdominal quadrant since one week which appear upon cough or straining. He was previously involved in an accident when a large wood fell and injured the abdomen from a distance of 3 meters high in the previous month. Physical examination showed abdominal bulging 18 x 10 cm in the right upper quadrant described slightly painful. Sonography revealed a bowel herniation of +/- 7 cm along the abdominal wall. Surgical exploration was performed which showed good bowel condition and after removal of injured omental tissue primary closure was done without the use of a mesh. Classic signs of hernia are only present in 50% of the patient with traumatic abdominal wall hernia which make clinical diagnosis become difficult especially on acute trauma cases. The me and type of surgical repair of traumatic abdominal hernia depends on the hernia defect associated trauma condition.

Conclusion: There are several challenges in the diagnosis and management of traumatic abdominal wall hernia. Therapeutic approach and management should be based on the patient-tailored condition.

Keywords: Hernia, Abdominal Wall Injury, Traumatic Hernia

Large epiphrenic diverticulum: a rare case presentation and literature review

Andry Irawan1, Erik Prabowo2
1Digestive Surgery Trainee, Faculty of Medicine, Universitas Diponegoro, Dr. Kariadi Hospital, Semarang, Indonesia
2Department of Digestive Surgery, Faculty of Medicine, Universitas Diponegoro, Dr. Kariadi Hospital, Semarang, Indonesia

Background: Epiphrenic diverticulum is a rare disease. One of risk factors is that patients with Systemic lupus erythematosus (SLE) reduce the esophageal motility and abnormal peristalsis which is isolated in the esophagus. Immunosuppressant drugs such as methotrexate and corticosteroids cause esophagitis and esophageal ulceration.

Case Presentation: A 56-year-old woman came with complaints of difficulty swallowing since 6 months ago. Complaints difficult to swallow is getting worse especially the last 1 month, there is vomiting after eating or drinking. The patient complains of regurgitation while eating and a feeling of burning in the lower chest. Weight loss has occurred. The patient had a history of Systemic Lupus Erythematous (SLE) and was given Methotrexate and Methylprednisolone treatment for approximately 4 years. The treatment is carried out by a distal esophagus diverticulectomy via laparotomy with good results.

Conclusion: Epiphrenic diverticulum is a rare disease, it requires more detailed excavation of risk factors and management. Handling with laparoscopy or open diverticulectomy gives the same good results, but advantages and disadvantages must be adapted to the current condition of the Covid Pandemic 19.

Keywords: Epiphrenic Diverticulum, SLE, Methotrexate, Methylprednisolone, Diverticulectomy

Description of partial bowel obstruction patients who medicated by surgical and non-surgical procedures in Saiful Anwar General Hospital Malang period of January-December 2019

Nur Huda Satria Kusuma1, Aries Budianto2
1Surgery Resident of Saiful Anwar General Hospital, Faculty of Medicine, Universitas Brawijaya, Malang, Indonesia
2Digestive Surgery Department of Saiful Anwar General Hospital, Faculty of Medicine, Universitas Brawijaya, Malang, Indonesia

Background: Bowel obstruction, partial or complete, is one of the most challenging abdominal emergencies. The decisions in which to operate or not-operate would determine the etiology and subsequently affect the patient’s outcome. Although the incidence is quite high, epidemiological data for this case are still lacking. This study explains the description of patients with partial bowel obstruction in two different approaches, by surgical and non-surgical procedures, to provide information in patient management.

Methods: Secondary data is obtained from medical records at Saiful Anwar General Hospital Malang, with the diagnosis of partial bowel obstruction, through the year of 2019. The patients should be hospitalized and following complete procedure. Patients under 18 years old are excluded. The data is analyzed within dependent T-test.

Results: The total sample is 43 patients, with the ratio of males and females 1,3:1. The surgical procedure are done to 19% of male and 81% of female patients (p-value 0,061), with mean age is 49,25±9,11 years (p-value 0,736). The operation procedure mostly used is laparotomy exploration, from which revealed peritoneal adhesion on 57% patients. Non-surgical procedures mostly used is colonoscopy, from which revealed rectal tumor 1/3 distal on 22% patients.

Conclusions: Non-surgical procedures are mostly choice by surgeons to treat patients with partial bowel obstruction. Colonoscopy is a diagnostic procedure which used to determine the cause of partial bowel obstruction. Gender and age are not related to the procedure chosen. These results are relevant to other developing countries.

Keywords: Partial Bowel Obstruction, Colonoscopy, Laparotomy Exploration
MACE as an alternative cholecystectomy in COVID 19 pandemic

Setyo Sugiharto1, Arga Budyono2
1Digestive Surgery Department of Universitas Brawijaya, Saiful Anwar General Hospital, Malang, Indonesia
2General Surgery Resident of Universitas Brawijaya, Saiful Anwar General Hospital, Malang, Indonesia

Background: Laparoscopic Cholecystectomy which requires expensive equipment, large-scale surgeon training, and generate aerosol has put most developing countries in inconvenience especially in COVID-19 Pandemic. Mini-laparotomy cholecystectomy has started replacing the prior method. This method is reported to give more advantage as morbidity and post-operative pain observed are lower than the prior method. Furthermore, transverse incision compared to oblique incision may result in better outcome due to the landmark MACE (Medial Arcus Costae Eight) salvaging more rectus abdominis muscle and lateral cutaneous nerve. This study observed post-operative pain, duration of surgery, length of hospital stays, and postoperative functional status between two groups.

Methods: This study was a cross-sectional study conducted in Saiful Anwar Hospital Malang’s Surgery Clinic for 7 months. Originally, there were 64 subjects participated but 4 subjects dropped out due to organ adhesion. Each group had 30 subjects agreed to undergo mini-laparotomy cholecystectomy. Patients underwent surgery, were given ketorolac injection, wound care, and standard observation in the hospital. The data were analyzed using independent T test, Mann-Whitney test, and Chi-square test.

Results: There was a significant difference between the mean value of Visual Analogue Scale (VAS) 6 hour, 12 hour, and 24 hour after surgery between transverse incision mini-laparotomy group (4.0±0.00; 2±0.00; 2±0.00) and oblique incision mini-laparotomy group (4.47±0.86; 2.87±1.63; 2.4±0.81) (p=0.005; 0.005; 0.010).

Conclusion: Mini-laparotomy cholecystectomy with transverse incision produces lower pain level than oblique incision in 6-hour, 12-hour, and 24-hour post-surgery. No significant differences were found between two groups in terms of length of hospital stay, duration of surgery, and post-surgery functional status. In the future, more subjects and post discharge follow up are advised. This will allow to discover complication that may develop later regarding the surgery.

Keywords: Choledolithiasis, Mini-Laparotomy Cholecystectomy, Transverse Incision, MACE

Amyand’s hernia: a rare case of inguinal hernia with appendicitis

Leonard Alen, Toar Mambu, Michael Tendean, Ferdinand Tjandra
Department of Surgery, Faculty of Medicine, Universitas Sam Ratulangi, Prof. Dr. R. D Kandou Hospital, Manado, Indonesia

Background: Amyand’s Hernia is the presence a veriform appendix within a hernia sac. It was firstly reported by Claudius Amyand, an English Surgeon back in 1735 London, when he operated an 11 years-old boy due to an inguinal hernia and found an inflamed perforated appendix within the sac. The importance of knowing an Amyand’s Hernia is that it might be confused with a standard strangulated hernia. Moreover, the incidence of Amyand’s Hernia is reported as three times higher in children than adults. The incidence of appendicitis within an inguinal hernia is even rarer, with an estimated rate at 0.07-0.13%.

Case Presentation: Here we reported a rare case of an Amyand Hernia at the right groin presented with whole abdominal pain of a 21 years old man admitted to RSUP Prof. R.D Kandou. We explained our approach to the diagnosis and the treatment of Amyand Hernia in this case. Our case of Amyand’s Hernia was repaired without mesh and required appendectomy and hemicolecotomy.

Conclusion: Amyand Hernia is a rare presentation of inguinal hernia with the appendix incarcerated within the hernia sac. It’s a diagnostic challenge for a surgeon due to the indistinct clinical presentation and low incidence.

Keywords: Amyand’s Hernia, Inguinal Hernia, Appendicitis

Pediatric volvulus caused by a persistent omphalomesenteric duct: a case presentation

Michael Raktion1, Ishak Lahunduitan2
1Resident of General Surgery, Universitas Sam Ratulangi, Manado, Indonesia
2Pediatric Surgery Division, Manado, Indonesia

Background: A persistent omphalomesenteric duct is one possible cause of small-bowel volvulus, a rare cause of acute abdomen in children.

Case Presentation: A ten-year-old boy (30 kg) with previous history of untreated constipation was admitted to the Emergency Department presenting with abdominal pain (initial onset four days prior to admission) and incoercible vomiting with an increasingly brownish content. At physical examination, the child was prostrated and pale, tachycardic, febrile, a widespread abdominal tenderness (significantly more intense in the RIF) and a hesitant gait with no claudication. Leukocyte count was 15.800 (85.6% neutrophils) and C-reactive protein (CRP) was normal. An upright abdominal X-ray revealed noticeable multiple air-fluid levels. Nasogastric Tube insertion with production of 100ml brownish content. A perforated appendicitis was suspected, and the child was subsequently subjected to an exploratory laparotomy. During exploratory laparotomy, a voluminous Meckel’s diverticulum with entangled fibrous cord (8x3cm) was identified as causing the volvulation. A de-rotation of the volvulus with excision of the channel and a bowel wedge resection at its point of origin were performed, followed by peritoneal lavage.

Conclusion: The child had a good postoperative outcomes. Discharged seven days after surgery, he presented with a good general condition, required no diet restrictions, had a normal intestinal transit, and the surgical wound healing progressed favourably.

Keywords: Persistent Omphalomesenteric Duct, Volvulus, Meckel’s Diverticulum

Report of two children with left sided incarcerated Amyand’s hernia

Jonathan Alvin Nugraha Halim1, Willy Hardi Marpaung2, R. Deden Sucanyana3
1General Practitioner, Dr Bratanata Jambi Army Hospital, Indonesia
2Pediatric Surgeon, Raden Mattaher Hospital, Indonesia
3General Surgeon, Dr Bratanata Jambi Army Hospital, Indonesia
Background: Amyand's hernia, which is the presence of a normal or pathological appendix as a part of an inguinal hernia, is considered as a rare clinical entity. We are reporting two very rare cases of left-sided incarcerated Amyand's hernia in children.

Case Presentation: A 9-month-old and a 14-month-old male children both presented with irreducible left inguinal swelling. Both of them had excessive vomiting, abdominal distention, and difficulties to pass faeces. With the diagnosis of left-sided incarcerated inguinal hernia, the patients were investigated and prepared for surgical management. During the operative procedures, we identified the presence of grossly normal appendix in the left scrotum as the herniated component on both cases. An appendectomy was performed on both cases, followed by high ligation of sack after cecum were reduced. After 2-3 uneventful postoperative days in the hospital, the patient was discharged. Further evaluations on both cases revealed no situs inversus on both cases. The underlying cause of this left-sided-incarcerated Amyand's hernia was the presence of a mobile cecum.

Conclusion: Left-sided incarcerated Amyand's hernia is a rare clinical entity particularly in children. We should always consider the potential involvement of appendix as part of inguinal hernia, even in the left inguinal region.

Keywords: Amyand's Hernia, Inguinal Hernia, Appendectomy

Primary anorectal malignant melanoma (a case report)

Arif Zuhani, Ramses Indriawan
1Department of Digestive Surgery, Faculty of Medicine, Universitas Mataram, NTB Regional Hospital, Mataram, Indonesia
2Department of Oncology Surgery, Faculty of Medicine, Universitas Mataram, NTB Regional Hospital, Mataram, Indonesia

Background: Anorectal malignant melanoma (AMM) is a rare and aggressive malignance with poor prognosis, yet no consensus of treatment exists to date. Abdominoperineal resection surgery (APR) is the standard treatment of anorectal malignant melanoma, capable of controlling lymphatic spread and obtaining a large negative margin for local control but it can lead to complications. Wide local excision (WLE) allows for quicker recovery and has minimal impact on bowel function (i.e., bypassing the need for a stoma).

Case Presentation: A 65-year-old female patient presented with a 10-months history of lump surrounding anus and painless rectal bleeding. The characteristic finding from MSCT imaging led to a diagnosis of anorectal cancer. Histopathological examination confirmed malignant melanoma. The patient underwent abdominoperineal resection and wide local excision. After procedure patient in stable condition, no bleed, with permanent colostomy was discharged. Further evaluations on both cases revealed no situs inversus on both cases. The underlying cause of this left-sided-incarcerated Amyand's hernia was the presence of a mobile cecum.

Conclusion: Left-sided incarcerated Amyand's hernia is a rare clinical entity particularly in children. We should always consider the potential involvement of appendix as part of inguinal hernia, even in the left inguinal region.

Keywords: Amyand's Hernia, Inguinal Hernia, Appendectomy

Laparoscopic surgery during Coronavirus Disease 2019 (COVID-19) pandemic in digestive surgery division of Dr. Sardjito Hospital, Yogyakarta

Arum Linangkun, Agus Barmawi, Imam Sofii, Nurcahya Setyawan, Adeodatus Yuda Handaya
1Department of Digestive Surgery, Department of Surgery, Dr. Sardjito Hospital, Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia
2Division of Digestive Surgery, Department of Surgery, Dr. Sardjito Hospital, Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

Background: A concern of performing laparoscopic surgery during global pandemic coronavirus disease 2019 (COVID-19) has been raised due to the high risk of viral transmission. After some considerations of its benefits, many society guidelines and recommendations finally approved it as safe procedures. We reported and evaluated the risk and incidence of COVID-19 transmission during necessary laparoscopic procedures in Division of Digestive Surgery, Dr. Sardjito Hospital, Yogyakarta.

Methods: We studied 37 cases laparoscopic surgeries from June-September 2020 in our division. Modifications and precautions to reduce viral transmission were used, such as mandatory preoperative screening (COVID-19 scoring system and a SARS-CoV-2 antibody test), selective smoke evacuation system, lowering abdominal pressure and minimizing the use of energy devices (ultrasonic scalpel and electrosurgery).

Results: There has been no evidence of COVID-19 transmission within surgical team and patients during laparoscopic surgery procedures, between June-September 2020 in the Division of Digestive Surgery.

Conclusion: We suggest that laparoscopic surgery procedure is a safe procedure during COVID-19 pandemic.

Keywords: Laparoscopic Surgery, COVID-19, Surgical Aerosols

Aase report: acute mesenteric ischemia

Yipno Wanhar, Deny Septarendra
1 Resident of General Surgery Program, Medical Faculty, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia
2Teaching Staff of Digestive Surgery Division, Medical Faculty, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia

Background: Acute mesenteric ischemia (AMI) is a rare condition which could cause a high mortality rate in patients. This condition correlates with bad prognosis in patients. Here we present a case of 41 year old male complaining of tenderness in his abdomen since 3 days.

Case Presentation: We undergo an exploratory laparotomy procedure with our assessment of generalized peritonitis in this patient. During surgery, we found thrombus in jejunum and terminal ileum mesenteric vascularity with 450 cm length in necrotic segment. We decided to carry out a segmental resection of necrotic segment. Our patient was administered in intensive care unit for strict observation post operatively for 8 days before being transferred to low care unit. We planned a comprehensive parental and enteral nutrition combination for this patient. We were able to discharged this patient after 10 days of hospital care with good condition. Acute mesenteric ischemia is a surgical emergency

Case presentation of acute-fine gush diverticulum obstruction: case reports and literature review

Al Firman, Erjan Fikri
Department of Surgery, Faculty of Medicine, Universitas Sumatera Utara, Medan, North Sumatra, Indonesia

Background: Distal small bowel diverticulum is an unusual case and located in the duodenum and jejunum. A large ileal diverticulum is extremely rare but should be considered during examination for indistinct gastrointestinal bleeding. This case report highlights an unusual case of a large ileal diverticulum.

Case Presentation: This study is a case report presenting the case of a 10 year old male who was admitted to the emergency department at the General Hospital of the Universitas Sumatera Utara, Medan, Indonesia. The patient complained an abdominal pain since 4 days, gradually getting worse. Initial treatment was fasting, then administration of intravenous fluids, decompression using a nasogastric tube and catheter, then administration of antibiotics. Then laparotomy exploration was performed, with a transverse incision 2 cm below the umbilicus. Diverticulectomy and ileostomy were performed.

Conclusion: Small bowel diverticulum disease is a rare disease; in this case, it covers the entire small intestine. It requires effective and timely management to make a right decision.

Keywords: Small Bowel Diverticulum, Diverticulectomy, Small Bowel Obstruction

Case report of massive abdominal hernia: lesson learned from a rare case

Ngakan Agung Mugi Raharja¹, Made Agus Dwianthara Sueta²
1Resident in General Surgery Department, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Denpasar, Indonesia
2Lecturer of General Surgery and Urology Department, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Denpasar, Indonesia

Background: Massive abdominal hernia remains a special surgical challenge, which commonly result from necrotizing fascitis in patient with hollow viscous perforation or multiple failure of herniorrhaphies. There is no single simple surgical procedure to provide correction for this condition, and the risk for recurrence of hernia is high.

Case Presentation: A 50 years old female obese patient, presented with irregular mass on her abdomen over the last 2 years. On physical examination revealed a huge irreducible abdominal hernia, 20 cm in diameter. Ultrasound review shows shadow of bowel in the subcutaneous layer at the umbilical region. During operation, an umbilical hernia with grade IV omental adhesion, rupture of sigmoid colon and tumour of the appendix was found. The hernia sac and omentum was excised, appendectomy was performed and the inguinal defect was closed using prosthetic mesh.

Conclusion: Careful preoperative preparation, prosthetic mass selection, operative technique, and postoperative care are required for successful management of massive abdominal hernias.

Keywords: Massive abdominal hernia, massive hernia repair, Rives-Stoppa technique.
Case report: enterocutaneous fistula due to neglected strangulated right inguinal hernia

Felix Hadi Nainggolan¹, Reno Rudiman³, Trimayu Sukandar³
¹Surgery Resident, Faculty of Medicine, Universitas Padjadjaran, Hasan Sadikin General Hospital, Bandung, Indonesia
²Department of Digestive Surgery, Faculty of Medicine, Universitas Padjadjaran, Hasan Sadikin General Hospital, Bandung, Indonesia
³Department of Surgery, Dr. Slamet Garut General Hospital, Bandung, Indonesia

Background: Inguinal hernia is one of common surgical problem, which without proper and adequate treatment will significantly increasing the morbidity of mortality of the patient. Despite the fact that enterocutaneous fistula formation that occurs in strangulated cases is a rare complication. Most of these fistula have been reported from developing countries like India and Nigeria and is usually the result of poverty, lack of knowledge, neglect, late presentation and lack of proper management.

Case Presentation: 65 years old male presented with complaining of a discharging wound on the right groin for two years. Exploratory laparotomy carried out through the lower midline incision and the prolapse loop was released from adhesions by sharp dissection. A loop of the terminal ileum and ascending colon adhered to the area where the prolapsed part was coming out. A limited right hemicolectomy was performed with end-to-end hand-sewn ileocolic anastomosis. The inguinal incision was extended laterally and hemiortomy and herniorrhaphy were done.

Conclusion: This unique case report of a complication and associated morbidity of treatment of inguinal hernia, The case also supports the principle that early referrals and the elective repair of inguinal hernias is the most effective way to prevent these complications.

Keywords: Inguinal Hernia, Enterocutaneous Fistula

Comparative influence of continuous large stitch and small stitch for abdominal skin closure with nylon on Transforming Growth Factor Beta expressions in Wistar rats (Rattus norvegicus)

Antonius Arif Kusuma¹, Imam Sofii²
¹Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia
²Division of Digestive Surgery, Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia

Background: Abdominal wall closure method is an important aspect of effective incision closure, in addition to choose of suture material. TGF-β has an important role in the process of healing skin wounds. Technique used for skin closure influences the quality of wound outcome. This study aims to compare the large stitch technique with the small stitch technique for abdominal skin closure.

Methods: Twenty rats were used in two groups. The small stitch group received 5 mm small tissue bites and the large stitch group received 1 cm large bites. The incisions of skin were closed by running suture using nylon. After 4 and 7 days, animals were euthanized. Histological sections were examined for TGF-β expression by immunohistochemistry. The t-tests were used to detect a statistical difference in two groups.

Results: Rats in the small stitch group had higher TGF-β expression on days 4 and 7 than those in the large stitch group (72,7 [SD 17,37] vs 41,9 [SD 11,74], p = 0,011; 69,06 [SD 7,56] vs 40,26 [SD 7,35], p = 0,000).

Conclusion: The continuous small stitch interval group had a higher TGF-β expression than the continuous large stitch group and was statistically significant.

Keywords: Nylon, Large Stitch, Small Stitch, TGF-β, Abdominal Skin Closure

Delayed laparotomy and gastric repair in neonatal gastric perforation

Ali Sibra Mulluzi¹, Barmadisatrio³
¹Surgery Resident, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia
³Staff of Pediatric Surgery, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia

Background: The incidence of gastric perforation in neonates is rare, but has a high mortality rate. The mortality rate in this case reaches 15-70%. Spontaneous gastric perforation in neonates is estimated to occur in one in 2,900 live births and accounts for approximately 7% of all gastrointestinal perforations in neonates and children.

Case Presentation: We present a case of gastric perforation complicated by sepsis, anemia, thrombocytopenia, and hypoalbumin in a 3-day-old girl on admission. The patient was brought to the emergency room of Dr. Soetomo Hospital Surabaya with complaints of vomiting blood from the age of 1 day. Enlarged stomach and fever. On physical examination, it was found that the general condition was weak with an axillary temperature of 38.2 °C. On examination of the abdominal region, the abdomen looked distended, vein ectasia, and periumbilical hyperaemia. In percussion, there is no deafening of the liver. From the results of laboratory examinations Hb 10.7, Platelet 14000, Albumin 2.6, Examination of the babygram image shows a pneumoperitoneum. In this patient at first, peritoneal drainage was performed to decompress with a needle because there were signs of Abdominal Compartment Syndrome (ACS), then optimized it in the intensive room to prepare an exploratory laparotomy. 5 days after needle decompression was done, laparotomy exploration and primary repair of gastric perforation was performed. Patient’s condition were improved and now after 3 years, the patient is without complaints and grow healthily.

Conclusion: Gastric perforation in neonates is a rare condition. The management principle for each patient is different depending on the patient’s condition. Needle decompression is indicated when ACS is present or the patient’s condition are not optimal for surgery. Definitive laparotomy can be done after the patient’s condition has stabilized. Proper selection of treatment can improve the patient’s outcome and reducing the risk of morbidity and mortality.

Keywords: Laparotomy, Gastric Repair, Neonatal, Perforation
Meckel’s diverticulum with peritonitis and gut obstruction in 19 years old man in Sanglah Hospital, Denpasar

I Ketut Wiargitha1, Andri Jaya Atmaja2
1Trauma Surgery Consultant, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital Denpasar, Bali, Indonesia
2Resident of Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital Denpasar, Bali, Indonesia

Background: Meckel diverticulum is a congenital disorder caused by incomplete obliteration of the vitelline duct. Nearly two centuries have passed since Johan Friederichs Meckel’s first depiction in 1809. In most cases the Meckel diverticulum is asymptomatic, and is usually found incidentally during abdominal surgery which can be caused by complications such as bleeding, diverticulitis, chronic ulceration, inflammation, and obstruction.

Case Presentation: 19 years old man, came to the Emergency Unit of Sanglah Hospital Denpasar with complaints of abdominal pain since 1 day ago in the epigastric area which switched to the right iliac fossa accompanied by complaints of fever, nausea, vomiting, and decreased appetite. Physical examination revealed increased bowel sounds, tenderness in the right iliac fossa and positive muscular defences. The initial diagnosis in this patient was generalized peritonitis suspicious of perforated appendicitis. The patient underwent emergency laparotomy, and found ileus obstruction due to Meckel diverticulum entanglement, inflamed Meckel diverticulum perforation, and appendicitis, and underwent diverticulectomy, band freeing, and appendicectomy. Postoperative patient recovery was good and the patient went home on day 6.

Conclusion: Meckel’s diverticulum is an interesting case because it is often found incidentally during the operation of a patient with an acute abdomen so we must consider it in every case of acute abdomen.

Keywords: Meckel’s Diverticulum, Bowel Obstruction, Appendicitis

The effect of fibrin glue application as a sealant in protecting colon anastomosis with continues suture compared to simple interrupted suture in intraperitoneal infection assessed from tissue hydroxyproline levels (Wistar rat study)

Agung Fuad Fathurochman1, Vicky Sumarki Budipramana2, Jusak Nugraha MD3
1Resident of Surgery, Faculty of Medicine, Universitas Airlangga, Soetomo General Hospital Surabaya, Indonesia
2Digestive Surgery Division, Department of Surgery, Faculty of Medicine, Universitas Airlangga, Soetomo General Hospital Surabaya, Indonesia
3Department of Clinical Pathology, Faculty of Medicine, Universitas Airlangga, Soetomo General Hospital Surabaya, Indonesia

Background: Anastomotic leakage is a serious complication in gastrointestinal surgery, especially in peritonitis condition. Simple interrupted suture is the gold standard for intestinal anastomosis. However, it has a greater risk of contamination by peritoneal fluid. Fibrin glue has been used as a barrier to protect the intestinal anastomotic suture by increasing hydroxyproline levels.

But its benefit in continuous suture is still debatable. This study aims to determine the effect of fibrin glue as a sealant in protecting colon anastomosis with continuous suture compared to simple interrupted suture in intraperitoneal infection conditions.

Methods: In this experimental study, the rats were divided into two groups: control group (Groups 1 and 2) and experimental group (Groups 3 and 4). Group 1 and 3 were performed by simple interrupted, while the others by continuous suture. Full-thickness incisions were made on the left colon and fibrin glue was applied over the sutures in experimental groups. The samples were taken on day 10.

Results: According to hydroxyproline levels (mcg/gr tissue), average values of the groups was 201.18±27.81 (Group 1), 208.73±17.81 (Group 2), 245.83±20.47 (Group 3), and 241.55±16.85 (Group 4). Tissue hydroxyproline levels in experimental groups were significantly higher compared to control (P < 0.05). In experimental group, mean hydroxyproline levels in subject with continuous suture was lower than simple interrupted suture; however it was not significant statistically (p=0.796).

Conclusion: As a result, the use of fibrin glue is beneficial to increase hydroxyproline level in colon anastomotic tissue especially in simple interrupted than continuous suture technique.

Keywords: Fibrin Glue, Simple Interrupted Suture, Continuous Suture, Colon Anastomosis, Peritonitis

Internal hernia due to congenital mesenteric defect in adult: a case report

Ovamelia Julio, Hing Theddy
Lewoleba General Hospital, Lembata District, East Nusa Tenggara, Indonesia

Background: Congenital mesenteric defect cause internal hernia in adult have rarely been reported. Commonly, it presents with intestinal obstruction causing incarceration or strangulation and diagnosed upon surgery.

Case Presentation: A 26-year-old man was admitted to the emergency department with sudden onset of severe generalized abdominal pain along with couple episodes of non-bilious vomiting. History of previous trauma or abdominal surgery was denied. Abdominal examination revealed a distended abdomen with diffuse tenderness and voluntary guarding. Bowel sounds were decreasing. Abdominal radiography revealed air-fluid levels. An emergency laparotomy was performed and a three-centimetres mesenteric defect was detected at the ileal region. Loops of small intestines had gone through the defect and strangulated. The defect was repaired, necrotic intestines were resected and primary end-to-end anastomosis was performed. Patient could tolerate the procedure and recovered well.

Conclusion: Thorough investigation and closed monitoring of patients with atypical signs of intestinal obstruction should be done and suspicion of internal hernia should always be considered despite its rarity.

Keywords: Internal Hernia, Congenital Mesenteric Defect, Adult
Factors related with intraabdominal hypertension in peritonitis patients in Sanglah General Hospital from January 2017-December 2018

Krishna Kurnia Pratama
General Surgery Department, Medical Faculty, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia

Background: Peritonitis is an emergency condition in the field of surgery due to its several complications. The most challenging is intraabdominal hypertension which can develop into abdominal compartment syndrome. This study aims to found factors that are associated with the occurrence of intraabdominal hypertension in peritonitis patients at Sanglah General Hospital in January 2017-December 2018.

Methods: This research used cross sectional analytic with total sampling technique with 136 peritonitis patients in Sanglah Hospital from January 2017 until December 2018. Data source obtained from medical report. Bivariate analysis done to find factors related with intraabdominal hypertension in peritonitis patients with chi square method and multivariate analysis with logistic regression.

Results: The majority are male, aged 15-64 years, organs involved in peritonitis in the form of hollow organs perforations, through trauma mechanisms, sepsis, leucocytosis, and hypoalbumin. Three variables were found to be significantly related they are, peritonitis caused by hollow organ perforation, sepsis, and hypoalbumin. Sepsis has significant relationship with intraabdominal hypertension. Sepsis is 0.262 times more likely to cause intraabdominal hypertension.

Conclusion: Monitoring intraabdominal pressure should be carried out, especially in patients with sepsis, hypoalbumin, and those suspected of having perforations in hollow organs and further research is needed with a larger number of samples and more superior research methods.

Keywords: intraabdominal Hypertension, Hypoalbumin, Peritonitis, Sepsis

Gastrointestinal stromal tumours: a case report

Kezia Christy1, Florence Audina1, Sugiharto Purnomo2
1General Practitioner, Faculty of Medicine and Health Science, Universitas Katolik Indonesia, Jakarta, Indonesia
2Division of Digestive Surgery, Department of General Surgery, Husada Hospital, Jakarta, Indonesia

Background: Gastrointestinal Stromal Tumours (GIST) are the most common mesenchymal tumours of gastrointestinal tract arising from the interstitial cell of Cajal. It usually found in the stomach (60%). Small GIST usually asymptomatic, if the size more than 2 cm, clinically manifest by gastrointestinal haemorrhage, melena or hematemes which cause chronic anaemia. The curative treatment is surgical resection of primary gastric GISTs with complete resection margin. This study is to introduce you a mild-symptoms-case of GIST.

Case Presentation: A 42-year-old male patient presented with melena for four days and hematemes once. There were no other GI tract symptoms. Blood test showed anaemia (Hb=8.9 g/dL). CT scan of abdomen reported a tumour from the gastric fundus to cardia about 6.1 x 4.5 x 4.1 cm. Gastroscopy showed submucosal tumour at gastric fundus. There was no any evidence of metastases or lymphadenopathy. Proximal gastrectomy was done. The patient was discharged in stable condition and scheduled for long term follow up under the Digestive surgery and Oncology surgery.

Result: Histopathology of tumour revealed a 10 x 6 x 4 cm sized neoplasm composed of fusiform and epithelioid cells. Mitosis was atypical mitosis. Immunohistochemistry reported that the tumour cells were positive for CD117, DOG 1, and SMA. S100 was negative.

Conclusion: GIST symptoms can be similar to other upper gastrointestinal bleeding symptoms. Therefore it is necessary to explore the risk factors and further examination so that a small GIST can be diagnosed and managed quickly.

Keywords: Gastrointestinal Stromal Tumours, Case Report

Gastrointestinal Stromal Tumours (GIST): a case study

Nisa Lystia Novianti, Bambang Am Am Setya
Digestive Surgery Division, Department of Surgery, Faculty of Medicine, Universitas Padjadjaran, Dr. Hasan Sadikin Hospital Bandung, Indonesia

Background: Gastrointestinal Stromal Tumours (GISTs) are rare neoplasms of the gastrointestinal tract associated with high rates of malignant transformation. Most GIST present asymptatically. In the past, these tumours were classified as leiomyomas, leiomyosarcomas and leiomyoblastomas. This case study aims to evaluate the GIST management in female patient.

Case Presentation: A female patient 35 years old came to Emergency Department of Dr. Hasan Sadikin Hospital Bandung with hematemesis since 1 day. Abdominal CT showed inhomogenous isodense lesion, defined, regular margins, intra-lumen of the stomach attached to the inferior wall of the stomach. Confirmation of malignant tumour intra-lumen in stomach were established. An antrectomy (Billroth 1) was performed to remove the tumour. GIST diagnose was established from Histopathology and IHC examination. Data was taken from medical record in August 3rd, 2020 at Dr. Hasan Sadikin Hospital, Bandung.

Conclusion: GIST can originate anywhere in the GI tract. The stomach (40–60%) and small intestine (30–40%) are the most common locations. GISTs present asymptomatically in 18% of cases, especially in cases of smaller tumours of the intestinal tract. Surgical resection with adjuvant imatinib 400 mg daily is the gold standard for the treatment of GIST

Keywords: GIST, Antrectomy

Management of Gastrointestinal Stromal Tumour (GIST) at Sardjito General Hospital: a case report

Rodijaya Putra1, Nurcahyo Setiawan2
1Trainee of Digestive Surgery, Faculty of Medicine, Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia
2Digestive surgery, Surgery Department, Faculty of Medicine, Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia

Background: Gastrointestinal Stromal Tumour (GIST) was originated from the mesenchymal cells of the gastrointestinal tract. This tumour originate from the interstitial cells of Cajal in the myenteric plexus. Surgery remains the mainstay
ABSTRACT

Management of multiple polyposis: a case report

Tegoeh Winandar¹, Suwardi²
¹Department of Surgery, Medical Faculty of Universitas Sebelas Maret, Surakarta, Indonesia
²Department of Pediatric Surgery, Universitas Sebelas Maret, Dr. Moewardi Hospital, Surakarta, Indonesia

Background: Hereditary gastrointestinal multiple polyposis syndrome occurs in about 1% of all cases of colorectal cancer and is associated with a broad spectrum of extra colon tumours. FAP is the most common polyposis syndrome, with a prevalence of 1 per 10,000 births, and accounts for around 0.5% -1% of all cases of colorectal cancer. Symptoms rarely occur in children and adolescents until large and numerous adenomas cause rectal bleeding or even anaemia. Colonoscopy screening with timely treatment of the identified lesions has led to a 55% reduction in CRC as the first sign that the patient is affected by FAP.

Case Presentation: A 17-year-old male patient presents with a bloody stool since 1 month ago. The patient had a history of intestinal tumour surgery 3 years ago. On physical examination there is no typical clinical findings. Colonoscopy and other examination shows multiple polyposis. The patient underwent a total colectomy with ileal-endorectal pull through. Patients require lifelong surveillance due to higher risk of colorectal cancer.

Conclusion: Multiple polyposis is hereditary, 1% occurs of all cases colorectal cancer. It cause rectal bleeding or even anaemia. Surgical performed with total colectomy and ileal-endorectal pull through is a choice for treatment after showing diagnostic from colonoscopy

Keywords: Polyp Recti, Multiple Polyposis, Colectomy

Management of oesophageal achalasia at Dr. Sardjito Hospital: a case report

Rodijaya Putra¹, Agus Barmawi²
¹Trainee of Digestive Surgery, Dr. Sardjito Hospital, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia
²Digestive surgery, Surgery Department, Dr. Sardjito hospital, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

Background: Achalasia is a condition with absence of peristalsis at distal part of lower esophagus/LES (Lower Esophageal Sphincter) and hypotonicity of LES that cause a failure of smooth muscle fibres to relax in swallowing food. The best management of achalasia is by using minimal invasive approach regarding to availability of hospital’s facilities. This case report is aim to report the best management of achalasia occur at dr. Sardjito hospital, Yogyakarta, in July 2020 confined to hospital facilities.

Case Presentation: A 38-years-old male came to digestive surgery outpatient ward Dr. Sardjito Hospital, Yogyakarta, in July 2020 that had been managed for achalasia. We had enrolled a clinical, laboratory and radiology examination toward patient and managed with minimally invasive surgery which was a Heller myotomy and fundoplication by laparoscopic guided endoscopic. He was in good condition during outpatient evaluation and difficulty in swallowing was not recognized anymore.

Conclusion: Achalasia should be diagnosed as soon as possible so that the best management could be applied with medical management or minimally invasive surgery and the hospital length of stay would be in short term.

Keywords: Achalasia, Management, Minimally Invasive

Mesenteric venous thrombosis causing bowel ischemia: a case report

Ika Ariandana¹, Gede Eka Rusdi Antara²
¹General Surgery Resident, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Denpasar, Bali
²Digestive Consultant, Digestive Division, General Surgery Department, Faculty of Medicine Udayana, Sanglah General Hospital, Denpasar, Bali

Background: Mesenteric venous thrombosis (MVT) is an uncommon cause of mesenteric ischemia accounting for 5–15% of the cases. Mesenteric venous thrombosis is an abdominal emergency that is rarely diagnosed early. Abdominal pain, vomiting, fever, and hematochezia are the characteristic presenting complaints. Tenderness, distension, and diminished intestinal sounds were the prominent abdominal physical findings in this case and were often associated with tachycardia and hypotension. Causes of MVT include prothrombotic states, trauma and intraabdominal infections. Advances in the radiology techniques and anticoagulation have led to improved diagnosis and outcomes.

Case Presentation: A 31-year-old male with a medical history of arrhythmia came to hospital complained with a 1-week history of epigastric pain, nausea and vomiting. The epigastric pain was sharp and severe in character and made markedly worse by eating, drinking and deep inspiration. We performed exploratory laparotomy and found necrotic bowel and the mesentery appeared cyanotic and dusky. The entire necrotic bowel, including the mesentery and normal appendix, was resected with end to end anastomose. The pathological
anatomy result shows extensive haemorrhagic infarction in the mucous layer to the serous and fibrin thrombus in the submucosal to serous blood vessel without any sign of malignancy. The outcome was good, the patient was discharged 9 days after surgery.

Conclusion: MVT is an uncommon, yet important cause of intestinal ischemia. Treatment is mainly medical using anticoagulation as soon as the diagnosis is made even in the presence of bleeding or the need for surgical intervention.

Keywords: Mesenteric Venous Thrombosis, Intestinal Ischemia, Acute Mesenteric Ischemia

Outcome of Ladd’s procedure in incidentally intestinal malrotation adult patient with perforated appendicitis: a case report

Rendi Singgih1, Nelis Fitriah Handayani3, Andry Irawan2
1Department of Surgery, Cimacan Regional General Hospital, West Java, Indonesia
2Digestive Surgery Training Program, Universitas Diponegoro, Central Java, Indonesia

Background: Intestinal malrotation is a rare congenital condition caused by the absence or incomplete rotation of the small bowel during the embryonic period. The presentation of intestinal malrotation in adults is rare. This case study aims to evaluate the outcome of Ladd’s procedure in incidentally intestinal malrotation adult patient with perforated appendicitis.

Case Presentation: We describe the case of a 36-year-old man with sudden onset diffuse abdominal pain felt since 3 days before entering the hospital. Pain initially felt in the epigastric region a few weeks before and then moved to the lower right quadrant. Last 3 days the pain becomes very severe and occurs the entire stomach. When an exploratory laparotomy performed, we found perforation of appendix and intestinal malrotation accidentally. In this case report we will discuss the outcome intervention of Ladd’s procedure in patient with intestinal malrotation. The Ladd’s procedure was successfully carried out in this case. Postoperative conditions without complications and symptoms gradually diminish during treatment.

Conclusion: Non-specific abdominal complaints in adults should raise suspicious the possibility of intestinal malrotation. This case highlights the importance of thinking other possible causes for patient complaints and their diagnosis.

Keywords: Intestinal Malrotation, Ladd’s Procedure, Exploratory Laparotomy

Pediatric inguinal hernia that been treated with laparoscopy-assisted extraperitoneal ligation at Dr. M. Djamil General Hospital, Padang, Indonesia

Iqbal Arnif1, Jon Efendi2, Budi Pratama Arnofan3
1General Surgery Resident, Faculty of Medicine, Universitas Andalas, Dr. M Djamil General Hospital Padang, West Sumatera Province, Indonesia
2Pediatric Surgery Division, Faculty of Faculty of Medicine, Universitas Andalas, Dr. M Djamil General Hospital Padang, West Sumatera Province, Indonesia
3Pediatric Surgery Division, Faculty of Medicine, Universitas Andalas, Dr. M Djamil General Hospital Padang, West Sumatera Province, Indonesia

Background: Pediatric inguinal hernias can be treated with conventional and laparoscopy methods. Laparoscopic percutaneous extraperitoneal ligation binds the internal inguinal ring by making suture that been knotted extra peritoneally and then implanted to the subcutaneous tissue. Pediatric Surgery division at RSUP Dr M Djamil modify the technique by using an 18G intravenous catheter needle that bended to form angle of 10-15 degree.

Methods: This study displays the pediatric inguinal hernias cases that been treated with laparoscopy extraperitoneal ligation at RSUP Dr M Djamil from January 2018 – December 2019.

Results: There are 68 cases of pediatric inguinal hernias that treated with laparoscopy extraperitoneal ligation. There are 63 cases that show no recurrences after treatment and 5 cases with inguinal hernia recurrence.

Conclusion: Laparoscopy percutaneous extraperitoneal ligation as a treatment of pediatric inguinal hernias at RSUP Dr M Djamil Padang have low recurrence rate, it is about 7.4 %

Keywords: Laparoscopy extraperitoneal ligation, inguinal hernia, internal inguinal ring:

The comparison of Boey score and Pulp score in predicting the postoperative morbidity and mortality rate in gastric perforation treated with laparotomy surgery in Sardjito Hospital Yogyakarta

Helmy Sabri Nahdi1, Marijata2, Adeodatus2
1General Surgery Resident FKKMK, Universitas Gadjah Mada, Dr. Sardjito Hospital Yogyakarta, Indonesia
2Digestive Surgery Division FKKMK, Universitas Gadjah Mada, Dr. Sardjito Hospital Yogyakarta, Indonesia

Background: Currently, there is no standard for determining the mortality of gastric perforation. Gastric perforation has a high mortality rate Boey and PULP scoring are mortality prognostic indicators of gastric perforation. This study aims to obtain the best scoring system in predicting morbidity, mortality, and survival rate of patients with gastric perforation.

Methods: The retrospective cohort study was carried out in 34 patients diagnosed as gastric perforation in Sadjito hospital, Yogyakarta from 1st January 2015 to 31st May 2020. The independent variables were the BOEY and PULP score and the dependent variables were postoperative morbidity and mortality rates. Chi square, Kaplan Meier and Cox-regression test were applied for the univariate, bivariate and multivariate analysis.

Results: The chi square analysis between the independent and dependent variables (post-operative morbidity) resulted in a p-value of >0.05, showing insignificance upon the morbidity and mortality rate post-operatively. The bivariate analysis using p-Log rank of the independent and dependent variable (Post-operative mortality), showed a p-value of <0.05 with a HR of 5.8, 95% CI of 1.64-21.06 for Boey’s score, and a HR of 74.7, 95% CI of 15.5-359.92 for PULP score. The multivariate analysis using the Backward Cox Regression test resulted in a HR of 2.3, 95% CI 1.28-82.2. Therefore, it was found that BOEY score is 2.3 times more accurate as prognostic indicator for mortality than PULP score.

Conclusion: Boey score is 2.3 times more effective than PULP score to predict morbidity and mortality rate after a laparotomy correction of gastric perforation.

Keywords: Gastric perforation, BOEY’s score, PULP score, morbidity, mortality, survival rate
ABSTRACT

Case report: polycystic liver disease in Dr. Sardjito General Hospital

Rianto Prabowo¹, Agus Barmawi²
¹Trainee of digestive surgery, Dr. Sardjito Hospital, Faculty of Medicine, Health, and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia
²Digestive surgery, Surgery Department, Dr. Sardjito hospital, Faculty of Medicine, Health, and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

Background: Polycystic liver disease (PCLD) is a rare disease, and is generally found in routine abdominal echography. Though considered benign, PCLD can greatly affect the quality of life, and in some cases can be lethal. We should not neglect these patients and must follow them closely in order to act at the right time due to the absence of an effective medical therapy that can contribute to cure. There are several surgical approaches available (as partial hepatectomy) but the only curative therapy is liver transplantation. It is important to develop different approaches (prevention, surveillance or even therapeutics) in order to decrease the volume of cysts and prevent their growth and consequently the hepatic failure.

Case Presentation: we presented the case of a female, 53th years old with chief complain of upper right abdominal pain since 2 month ago, followed by nausea and vomiting. The abdomen also getting bigger day by day. She had been examined with USG (ultrasoundography) without clear origin and followed by CT scan with result of liver cyst. After one month of therapy she hasn’t got the improvement of pain and then refer to Sardjito General Hospital.

Conclusion: the definitive treatment of polycystic liver is hepatectomy or liver transplant. Management of this patient is unroofing cyst and biopsy.

Keywords: Liver Cyst, Unroofing, Hepatectomy, Liver Transplant

The comparison of suture effect using polyvinylidene fluoride and polyglycolide on expression type I and III collagen within abdominal incision lines in Albian rats Wistar strain (Rattus norvegicus)

Bagas Satrio Utomo¹, Imam Sofii²
¹Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia
²Division of Digestive Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia

Background: Incisional hernia is a frequent complication of abdominal wall incision and has a high rate of recurrence. Wound healing is affected by the ratio of collagen types 1 and 3. Another important factor that also affects the occurrence of incisional hernia is the thread material and sewing method used. This study aims to compare the effect of the use of polyvinylidene fluoride thread and polyglycolide thread on the level of collagen type 1 and 3 ratios on the incision line of abdominal fascia of Wistar albino rat strain (Rattus norvegicus).

Methods: Forty rats were divided into four groups. First group with suture material polyvinylidene fluoride. Other group had sutured with material polyglycolide. Rat decapitated oh day 4 and 7. Samples of fascia (1x0.5 cm) are taken for analysis of collagen count using immunohistochemistry staining method. Differences were analyzed with Mann-Whitney if the data were not normally distributed and independent t-test when data was normally distributed.

Results: There was significant difference of collagen I/collagen III ratio expression in rats stitched by Polyvinylidene Fluoride and rats stitched by polyglycolide day 4 and 7 post decapitation. [(0,88±0,23) vs (0,53±0,08) p=0,000; (1,77±0,65) vs (1,03±0,28) p=0,004]

Conclusion: Collagen I/collagen III ratio expression in rats stitched by Polyvinylidene Fluoride are significantly higher than rats stitched by polyglycolide either on day 4 and day 7.

Keywords: polyvinylidene fluoride, polyglycolide, collagen type 1, collagen type 3

Strangulated umbilical hernia: a case report

Tito Ade Putra¹, I Gede Swedagatha²
¹Resident of Surgery Department, Faculty of Medicine, Universitas Udayana, Bali, Indonesia
²Division of Trauma and Acute Care Surgery, Surgery Department, Faculty of Medicine, Universitas Udayana, Bali, Indonesia

Background: The abdominal wall hernia repair was one of the most frequently performed operations by general surgeons worldwide. The second most common hernia operations is repairs of umbilical hernia. It is estimated that 5% of individuals will develop an abdominal wall hernia over their lifetime. The risk of a hernia becoming incarcerated or strangulated is estimated between 1% to 3% over a person’s lifetime. If strangulated hernia occurs and bowel ischemia is present, the patient will have severe pain and may present with sepis. It is associated to a high rate of complications and mortality.

Case Presentation: In this paper, we report a 51 years old male patient presented with sharp, non-radiating pain in the left abdominal region, obstipation, and noted bulge at his umbilicus about one year ago, that does not shrink when he lying down since two days ago, the diameter about 7 cm. Plain Abdominal X-ray showed partial small bowel obstruction. The patient taken to operation theatre for laparotomy resection and re-anastomose ileum and repair hernia defect with mesh. Prior to surgery, the patient received antibiotic therapy with Cefazolin 2gr intravenous and the decompression Nasogastric Tube (NGT) was installed. On exploration it was found necrotic ileum along 15 cm and performed resection, followed by end to end anastomosis. After surgical procedure, patient’s hemodynamic was stable.

Conclusion: Overall mortality and prognosis of hernia are influenced by whether the surgery was emergent or elective. Mortality is increased to up to 3% with emergency surgery for strangulated bowel, notably when bowel resection is performed.

Keywords: Hernia, Umbilical, Strangulated

Strangulated left obturator hernia: case report and review of literature

Ali Akbar Rahmani¹, Bambang Am Am Setya Sulthana²
¹Resident General Surgery, Universitas Padjadjaran, Bandung, Indonesia
²Consultant of Digestive Surgery, Department of Surgery, Al Islam Hospital, Universitas Padjadjaran, Bandung, Indonesia

Background: Obturator hernia is an uncommon case of abdominal wall hernia
ABSTRACT

that only happen in 1% of abdominal wall hernia cases. In almost > 90 percent of cases, the diagnosis of obturator hernia is established during laparotomy exploration for obstruction of bowel. Another method for diagnosis is from imaging that were taken during admission, because of unclear causal of partial bowel obstruction.

Case Presentation: An emergency patient of Al Islam Hospital came with signs of bowel obstruction. He was 64 years old male, presenting with symptoms of bowel obstruction for 2 months. Abdominal CT showed left obturator hernia affecting the small intestine, accompanied by signs of strangulation without perforation. During laparotomy exploration, confirmation of left obturator hernia with ileum strangulation were established. Segmental ileum resection with primary end-to-end anastomosis, peritoneal toilet, adhesiolysis and hemiorthry were performed for closing the obturator foramen.

Conclusion: Clear diagnosis and early surgical treatment are crucial in management of obturator hernia. Delayed in intervention could lead high morbidity and mortality.

Keywords: Strangulated, Left Obturator, Hernia

Spontaneous pneumoperitoneum: case report

Samuel Marco Halomoan, Adi Muradi Muhar

Department of Surgery, Faculty of Medicine, Universitas Sumatera Utara, Medan, Indonesia

Background: Pneumoperitoneum is an appearance of free air in the peritoneal cavity, usually indicating a perforation of the hollow organ. However, in some cases the appearance of a pneumoperitoneum is not accompanied by intra-abdominal perforation so that it does not require a laparotomy, this is called spontaneous pneumoperitoneum. This literature describes a patient with squamous cell carcinoma of the tongue who had peritonitis-like symptoms but confirmed spontaneous pneumoperitoneum from negative laparotomy.

Case Presentation: A 60 years old man came to the emergency department with chief of complaint was progressive pain in the stomach since 2 days ago. Patient had a history of squamous cell carcinoma who had undergone chemotherapy and radiotherapy. The localized physical examination revealed diffuse abdominal muscle distension and rigidity. On the abdominal radiograph, Rigler’s sign was found. On the erect chest radiograph, free air is found in the right sub-diaphragm. The patient underwent an emergency laparotomy, perforation was not found in the distal esophagus to the colon.

Conclusion: Clinicians must be aware of this rare clinical entity. Algorithms and literature review about recent pneumoperitoneum management are needed.

Keywords: Spontaneous Pneumoperitoneum, Laparotomy Exploration, Free-Air Appearance

Sigmoid volvulus

Novi Christina Indrajaya, Nurhayat Usman

Digestive Surgery Division, Departement of Surgery, Faculty of Medicine, Universitas Padjadjaran, Dr.Hasan Sadikin General Hospital, Bandung, Indonesia

Background: The incidence of volvulus in adults varies. In Western countries, volvulus is a rare case, and accounts for 10-13% of large bowel obstruction. Obstructive can occur primary or secondary (due to anatomic malformations, malrotation, adhesion, tumour, and diverticula). Volvulus is a rare case, therefore the authors are interested about case finding.

Methods: Data was taken from medical records in January 28th, 2020 at Hasan Sadikin General Hospital Bandung

Results: A 26-year-old male patient presents with pain at the whole abdomen from 1 week prior to admission. At physical examination, the abdomen looks convex, tense, decreased bowel sounds, tenderness at the whole abdomen, and absent of liver dullness. The abdominal X-ray results “coffee bean sign” suggestive of colon volvulus with pneumoperitoneum. The patient was performed exploration laparotomy and Hartmann procedure. Postoperatively, the patient was treated for 9 days and then the patient was discharged in good condition.

Conclusion: Volvulus is a rare case, accounts for 10-13% of large bowel obstruction. In this case, the patient came to the hospital with sepsis and peritonitis condition. A plain abdominal X-ray was performed, showed a coffee bean sign and a pneumoperitoneum that means a volvulus and bowel perforation. Then laparotomy exploration and Hartmann procedure were performed. The patient was treated for 9 days then went home in good condition.

Keywords: Sigmoid Volvulus, Intestinal Obstruction, Pneumoperitoneum, Laparotomy Exploration, Hartmann Procedure

Profile of gastroenteropancreatic neuroendocrine neoplasm at Sardjito Central General Hospital of Yogyakarta in term of 2017-2019

Slamet Rahardja, Agus Barmawi

1Digestive surgery Fellowship Programmed, Sub-Division of Digestive Surgery, Sardjito Central General Hospital, Indonesia
2SubDivision of Digestive Surgery, Sardjito Central General Hospital, Indonesia

Background: Gastroenteropancreatic Neuroendocrine Neoplasms (GEP-NENs) were represented a heterogenous group of rare neoplasms in digestive system, but their prevalence has increased substantially over in the past three decades. The management of GEP-NENs follows the principle as taking into consideration key feature of NENs such as proliferative activity, somatostatin receptor expression, tumour growth rate and extent of disease. The two major independent prognostic parameters and should always be assessed are disease stage and tumour grade. This study aims to describe profile of gastroenteropancreatic neuroendocrine neoplasms at Sardjito Central General Hospital of Yogyakarta in term of 2017 to 2019.

Methods: All data of neuroendocrine neoplasms from digestive system fulfill inclusion criteria from January 1 2017 until December 31 2019 from Medical Record of the Department of Sardjito Central General Hospital were collected. This descriptive analytic by comprises 9 variables.

Results: There were 30 patients included this study; the gender is no difference between male subject (n=16) and female subjects (n=14). Median age was 51 years old. Majority of Body Mass Index (BMI) patients are normally, with mean 20.32 kg/m2. Except insulinoma cases, all of patients were overweight until obesity. Located tumour majority at the rectum (26.6%), following gaster (16.6%), pancreas (16.6%), liver (6.6%), duodenum (6.6%), appendix (6.6 %), retroperitoneal (6.6%), caecum (3.3%), colon sigmoid (3.3%).
anorectum (3.3%) and unknown primary (3.3%). For imaging studies, 80% had metastases lymph node and liver. By morphology of the 5th edition of the WHO classification of tumours, we had 21 cases (70%) well-differentiated group or neuroendocrine tumour (NET) and 9 cases (30%) poorly-differentiated group or neuroendocrine carcinoma (NEC). Surgical of radical resection had 7 cases (2.33%), and other cases are palliative therapy by medications chemotherapy and Ocreotide. The mortality rate of gastroentero neuroendocrine neoplasms cases are highest, when the first-time patients came to Sardjito Hospital until the time of research, 23 cases (85.18%) is died with survival of life below 1 years. But, exceptionally to the patients of pancreatic neuroendocrine carcinoma (Insulinoma) are still life until now.

Conclusion: The incidence of GEP-NENs were increased. The gender is not differentiated. Except insulinoma, the certain of diagnosis of neuroendocrine neoplasms is not quickly and then management of medical and surgical treatment is so lately. The majority of GEP-NENs patients had come who advanced stage and then the mortality rate is highest.

Keywords: Gastroenteropancreatic, Neuroendocrine Neoplasia.

A challenging condition of recurrent jejunoileal intussusception in adult in rural area: a case report

Reymond Hendrikson1, I Komang Agus Setiawan2
1 General Practitioner, dr. T.C Hillers General Hospital, Maumere, East Nusa Tenggara, Indonesia
2 Department of Surgery, dr. T.C Hillers General Hospital, Maumere, East Nusa Tenggara, Indonesia

Background: Intussusception is common in the paediatric population but adult Intussusception is a rare phenomenon and usually presents with bowel obstruction. Adult intussusception is seldom idiopathic and frequently associated with secondary causes such as benign and malignant tumours. Small bowel intussusceptions are less common than the ileocolic type, with jejunoileal intussusceptions being the rarest, accounting for 5% of all cases of intussusceptions. Although the correct diagnosis is often based on intraoperative findings, modern non-invasive and invasive imaging techniques can be very helpful in directly identifying these lesions preoperatively. A delayed treatment usually found in some patients because they prefer to go to alternative medicine and it will make a worsening feature with potential for severe complications if not promptly recognized and treated. The optimal treatment of adult intussusception is not universally agreed upon. All authors agree that laparotomy is mandatory, established the principle of resection without reduction whenever possible.

Case Presentation: We discuss a 35-year-old man who comes with complaints of pain throughout the stomach field accompanied by nausea, vomitus, black Chapters dan fatigue. The patient had complained of pain like this since 6 months before going to the hospital. Patients afraid of having surgery and decide to go to alternative medicine for the disease.

Conclusion: Finally, the patient gets improvement of condition and performed bowel resection surgery and was treated for 6 days.

Keywords: Adult Intussusception, Jejunoileal, Delayed treatment, Ileus Obstructive, Laparotomy, Bowel Resection.

Colon injury caused by abdominal trauma in Hasan Sadikin Hospital Bandung

Arief Dwinanda, Reno Rudiman
Department of Digestive Surgery, Medical Faculty, Universitas Padjadjaran, Hasan Sadikin Hospital, Bandung, Indonesia

Background: Colorectal injury is common following penetrating trauma to the abdomen, and, colon is the second most frequently injured organ, next to the small bowel. This study aims to find out the characteristics of colon injury caused by abdominal trauma in relation to age, gender, location of injury, colon injury severity scale, surgical procedure, and mortality rate in Hasan Sadikin Hospital Bandung.

Methods: This is retrospective descriptive study that was conducted in the Department of Surgery, Hasan Sadikin Hospital, Bandung from 1 January 2015 to 31 December 2019. Data were selected from medical records of all patients diagnosed with colon injury caused by abdominal trauma.

Results: Twenty cases were reported with 35 (range 17–56) year in Mean age. There were 14 males (70%) and 6 females (30%) with descending colon injury in 12 cases (60%), transverse colon injury in 3 cases (15%), and ascending colon injury in 5 cases (25%) were reported. Seventeen cases (85%) were reported with combined trauma. Colon injury severity scale due to AAST Classification were grade III in 9 cases (45%), grade II in 9 cases (45%), and grade I in 2 cases (10%). For surgical procedure, faecal diversion was performed in 13 cases (65%), and primary repair in 7 cases (35%). There was no mortality.

Conclusion: Male adults predominates the case series. The most frequent location of injury was descending colon. The most frequent colon injury severity scale due to AAST Classification were grade II and grade III. Faecal diversion was the most frequent surgical procedure in colon injury, they were due to shock and the presence of enteric content. There was no mortality.

Keywords: Colon Injury, Abdominal Injury

Laparoscopic hybrid Whipple procedure: 2 serial cases

Hannan Khairu Anami,1 M. Iqbal Rivai,2 Irwan,3 Rini Suswita2
1 General Surgery Resident, Faculty of Medicine, Universitas Andalas, Dr. M Djamal General Hospital Padang, West Sumatera Province, Indonesia
2 Digestive Surgery Consultant, Faculty of Medicine Universitas Andalas, Dr. M Djamal General Hospital Padang, West Sumatera Province, Indonesia

Background: Management of pancreatic head tumour was evolved from open surgery, laparoscopic hybrid and pure laparoscopic surgery. Laparoscopic hybrid procedure means a combination laparoscopic surgery for resection of tumour and organs such as gasater, duodenum, pancreas, biliary duct and gall bladder while to reconstruct organs continuity post resection, we performed open surgery.

Case Presentation: Case 1 was a female 47 years old who came to emergency department of M Djamal Hospital, referred from district hospital, with chief complaint jaundice since 1 month before admission. She had an acticteric sclera and positive Courvoisier sign. Laboratory result shows an elevation of total, direct and indirect bilirubin with normal liver function. Abdominal CT scan shows an enlargement pancreatic head without vascular invasion. Laparoscopic hybrid Whipple procedure was done to remove the tumour in the head of the pancreas.
Hepato-Biliary-Pancreatic Surgery

Solid pseudopapillary tumour tail pancreas: a case presentation

Adhitya Angga Wardhana, Edwin Danardono
Digestive Surgery Division, Department of Surgery, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya

Background: Solid Pseudopapillary Pancreatic Tumour (SPPT) is a rare tumour with incidence of 1-2% of exocrine tumours and 13% of pancreatic lesions. The author's observations for 1 year (June 2019 - June 2020) there was only 1 case of pancreatic tumour with confirmed pathology of a solid pseudopapillary tumour of pancreas.

Case Presentation: Woman, 48 years old, already married. The patient presented with complaints of intermittent upper left abdominal pain, felt like being stabbed, since 6 months before admission. Mass can be palpated at upper left abdomen, and according to the patient, the mass was getting bigger. There are no complaints of nausea, vomiting, the patient can still eat as usual, sometimes patient felt bloating, there is no weight loss. Normal defecation and urination. Physical examination of the abdomen, palpable mass on left hypochondrial region, 15 cm in diameter, solid, firm margin, mobile and no tenderness. Laboratory results and tumour markers of CEA and CA19-9 were normal. CT scan of the abdomen with contrast revealed a mixed solid cystic lesion showing a malignant mass (most likely mucinous cystic neoplasm) of the pancreas with thickening of the mesentery wall in the hypogastric region. The patient underwent surgery for distal pancreatectomy with splenectomy. Pathological examination suggests a solid pseudopapillary pancreatic neoplasm (pT3NxMx). IHC examination results; Vimentin, CD10, CD56, Cyclin D-1, and Pan-CK all showed positive results and led to a Solid Pseudopapillary Neoplasm of Pancreas.

Conclusion: Solid Pseudopapillary Pancreatic Tumour is a form of pancreatic tumour that is rare and more common in women. Surgery is the main therapy, with the choice of surgery depending on the position of the tumour in the pancreas. Pathological examination and IHC are important tests to help diagnose a SPPT.

Keywords: Tumour, Solid Pseudopapillary, Pancreas, Neoplasm, Tail Pancreas

Liver resection profile in Prof. dr. R.D. Kandou General Hospital: 1-year experience

Michael Iskandar¹, Celine Martino¹, Michael Tendean¹, Toar D.B. Mambu², Ferdinand Tjandra², Jimmy Panelewen²
¹General Surgery Resident, General Surgery Department, Medical Faculty of Universitas Sam Ratulangi, Prof. Dr. R. D. Kandou, Manado, Indonesia
²Staff of Digestive Surgery Division, General Surgery Department, Medical Faculty of Universitas Sam Ratulangi, Prof. Dr. R. D. Kandou, Manado, Indonesia

Background: The role of liver surgery is increasing for primary and secondary liver tumours. One of the most feared complication of liver surgery is Post-
Hepatectomy Liver Failure (PHLF). The authors would like to present their experience in a year for liver surgery with morbidity and mortality including PHLF as parameters of evaluation.

Methods: This is a prospective study from July 2019-2020 in a single centre, in which patients with pre-existing liver pathology were assigned to receive liver resection. Types and duration of liver resection, duration of Pringle maneuver, and blood loss were measured. PHLF were evaluated using the ISGLS classification and morbidity were evaluated using Clavien-Dindo and FABIB classification. The energy device used varies from harmonic scalpel, ligatures, and Thulium-doped fibre laser (TOFL).

Results: A total of 17 procedures were performed, among them minor hepatectomies (58.82%) and major hepatectomies (41.18%). The mean duration of operation 5.3+2.2 hours, duration of parenchymal transection 91.5+45 minutes, and estimated blood loss 1638.2+1314.9 cc. A vascular occlusion method using Pringle maneuver with mean duration 31.67±22.8 minutes. PHLF incidence found were grade B (5.88%) and grade C (11.7%), while mortalities by Clavien-Dindo mostly are grade 2 (38.2%) and FABIB classification mostly are Bleeding (45%). The mean postoperative ICU is 3.06+4.7 days and mortality rate is as high as 23.52%.

Conclusion: Liver resection in our centre is quite good judging from the low incidence of PHLF, although mortality rate is as 23.52%. Due to that, surgical technique and team work between units involved needs to be improved even further.

Keywords: Liver Resection, Hepatectomy, PHLF

Colon transposition as management of esophageal stricture in Abdul Wahab Sjahranie Regional Hospital: a case report

Fritzky Wandy Thedjakusuma, Bambang Suprapto
Department of Digestive Surgery, Universitas Mulawarman, Abdul Wahab Sjahranie Regional Hospital, Samarinda, East Kalimantan, Indonesia

Background: Esophageal stricture is a narrowing of the esophageal lumen due to the formation of fibrosis in the esophageal wall and is one of the causes of dysphagia complaints.

Case Presentation: A 42-years-old man with the chief complaint was having difficulty swallowing food since 3 months before admitted to the hospital. The patient has a history of alcoholics. An Upper GI Endoscopy was performed which showed narrowing of the esophagus. The Thoraco-abdominal contrast MSCT examination was performed and Gastric Outlet Obstruction was obtained with thickening of the pyloric gastric and esophageal stricture middle third to distal. With these results, it was decided to perform distal gastrectomy Billroth II reconstruction and NGT placement. The results of anatomic pathology showed extensive fibrotic tissue with non-specific inflammation of the antrum-pyloric gastric. The patient showed improvement but the complaints recurred so the Esophagectomy - Colon Transposition was performed. The results of anatomic pathology of the esophageal tissue showed not show good results, so Esophagectomy - Colon Transposition was performed.

Conclusion: Colon transposition is an esophageal substitution method that is ideal for use in cases of esophageal stricture, especially in a history of alcoholics and exposure to other caustic substances.

Keywords: Esophageal Stricture, Alcoholics, Esophagectomy, Colon transposition

Case Report: A Case of Gallbladder Perforation: Presenting as Sepsis with Biliary Peritonitis

Wifanto Saditya Jeo, Caesar Rio Julyanto Putra, Andre Setiawan Suryadi
Department of Surgery, Faculty of Medicine, Universitas Indonesia, Cipto Mangunkusumo Hospital, Jakarta, Indonesia

Background: Gallbladder perforation is a rare but a life-threatening complication of cholecystitis.

Case Illustration: A 67-year-old male presented to the ED with icterus, abdominal distention, and decrease level of consciousness. Blood works show elevated white blood cell, and bilirubin. Ultrasound and CT scan shows thickening of the gallbladder wall, stones intra luminal, and ascites. We performed abdominal punction which then reveal bile was aspirated. We performed laparotomy and confirmed large amount of intraperitoneal bile.

Conclusion: Gallbladder perforation should be considered while evaluating abdominal problem particularly in critical illness.

Keywords: Peritonitis, Gallbladder perforation, Cholelithiasis, Cholecystitis.

Clipless laparoscopic cholesectomy in National Health Coverage Era: case series

Toby Hadinata Wiranegara, Dion Faisal, Bambang Suprapto
1General Practitioner, Tarakan Regional General Hospital, North Kalimantan, Indonesia
2Staff of General Surgery Department, Tarakan General Hospital, North Kalimantan, Indonesia
3Surgery Department, Medical Faculty of Universitas Mulawarman, A.W. Sjahranie General Hospital, East Kalimantan, Indonesia

Background: The incidence and treatment cost of cholelithiasis is quite high at this time. Cholelithiasis and its complications such as cholecystitis are the most common causes of cholecystectomy procedures. Laparoscopic cholecystectomy is the gold standard for symptomatic cholecystectomy with the advantages of shorter length of treatment, lower pain, faster healing period and better cosmetics than open cholecystectomy. The aim of this case series is to present some case report of symptomatic cholelithiasis performed by clipless laparoscopic cholecystectomy (intracorporeal knot-tying or intracorporeal suturing) during ligation a. cystic and cystic duct.

Case Presentation: We present four cases of symptomatic cholelithiasis who underwent clipless laparoscopic cholecystectomy. We traced data in Tarakan Regional General Hospital from 2017 to 2019 and found 197 cases of cholelithiasis. 29.8% of it were managed by laparoscopic cholecystectomy, whereas 10.15% cases were managed by open cholecystectomy. The rest of it were managed conservatively.

Conclusion: clipless laparoscopic cholecystectomy is an alternative method for performing a ligation. cystic and cystic duct. This method is considered quite simple, practical, safe and quite economical. This method requires a relatively slightly longer operating time compared to the laparoscopic cholecystectomy procedure with clips. However, there were no significant differences in general surgical procedure, morbidity, and length of stay. So this method is considered affordable during the national health coverage era in Indonesia.

Keywords: Clipless Laparoscopic Cholecystectomy, Intracorporeal...
ABSTRACT

Laparoscopic fenestration in polycystic liver disease: case report

Fariza Hakim Rio Branko1, Tomy Lesmana2
1Trainee of Digestive Surgery, Department of Surgery, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia
2Staff of Digestive Surgery, Department of Surgery, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia

Background: Polycystic liver disease is a group of genetic disorders in which cysts occur in the liver. The condition is inherited in autosomal dominant pattern. Prevalence of polycystic liver disease is about 0.01 per 100,000 population. The surgical management of polycystic liver disease is done by fenestration and performed if it causes symptoms related to increased liver volume. Fenestration procedure can be done through open surgery or laparoscopic surgery.

Case Presentation: 61 years old female patient complained of an abdominal distention. The patient also complained of abdominal pain, when eating the stomach felt full quickly, and had difficulty to take a deep breath. On physical examination, the liver felt enlarged from the right hypochondrial region to the umbilical region. MRI result multiple cysts in all liver segment with the largest size being 23x19x17cm. The patient underwent a laparoscopic polycystic liver fenestration surgery.

Conclusion: The short-term outcome of laparoscopic fenestration for patients with polycystic liver disease is superior to the open fenestration technique, but for long-term outcomes, further research is needed.

Keywords: Laparoscopic Fenestration, Polycystic Liver Disease

Risk factors related to gallstone formation in diabetes mellitus type-2 at Sanglah General Hospital

I Dewa Agung Sutanjaya Giri Nugraha1, Made Agus Dwianthara Suet1, I Gde Raka Widiana2
1Department of General Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia
2Department of Internal Medicine, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia

Background: Diabetes mellitus is a metabolic disorder characterized by hyperglycaemia due to impaired insulin secretion, insulin action, or both. The purpose of this study was to determine the risk factors for gallstones formation in patients with type 2 diabetes mellitus.

Method: This study was a cross-sectional retrospective study with analytic observational design. The study samples were taken using secondary data. The sample size was determined by consecutive non-probable sampling Methods: A total of 47 samples were included in this study.

Results: Sex had a moderate relationship with the incidence of gallstones with r value of 0.404 and p-value of 0.005. BMI had r value of 0.528 and p-value of 0.000, which means that BMI had a strong relationship with the incidence of gallstones. On the other hand, lipid profile had r value of 0.323 and p-value of 0.027, which means lipid profile has a moderate relationship with the incidence of gallstones. HbA1c had r value of 0.431 and p-value of 0.002, which means HbA1c had a moderate relationship with incidence of gallstones. The duration of DM had r value of 0.291 and a p-value of 0.047, which means duration of DM has a weak relationship with incidence of gallstones. Multivariate results showed that patients with higher BMI were 10, 9 times more likely to developed gallstones and it was the most dominant risk factor for gallstones.

Conclusion: There were significant relationships between sex, BMI, lipid profile, HbA1c, duration of DM with the occurrence of gallstones. BMI was proved to be a dominant risk factor.

Keywords: Sex, BMI, Lipid Profile, HbA1c, Diabetes Mellitus Duration, Gallstone

Gallbladder perforation in acalculous cholecystitis: a case report

Puta Andika Rama Wismawan1, Edwin Danardono2
1Surgery Resident, Faculty of medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia
2Staff of Digestive Surgery, Dr. Soetomo General Hospital, Surabaya, Indonesia

Background: Gallbladder perforation is a rare but potentially fatal case and requires diagnosis as early as possible. Gallbladder perforation is usually a complication of acute cholecystitis with or without stones. Gallbladder perforation is seen in 3% of acute cholecystitis cases and gallbladder stones are usually present. Diagnosis can be assisted by abdominal ultrasound and abdominal CT-scan. This study aims to evaluate the gallbladder perforation in acalculous cholecystitis case.

Case Presentation: A 42-years-old man complained of abdominal pain during his 3rd day treatment at ICCU Dr. Soetomo Hospital due to a history of coronary heart disease (CHD). The patient initially complained of pain in the gut, the pain then moved to the lower right abdomen then spread throughout the stomach and remained. With abdominal ultrasound, at that time a gallbladder hydrops image was obtained, accompanied by a sludge gallbladder, minimal fluid collection in the lower right abdominal region and the appendix was not visualized. The main treatment option for gallbladder perforation caused by acalculous cholecystitis is cholecystectomy.

Conclusion: In this case the patient developed acalculous cholecystitis which was probably caused by critical ill (3 days treatment history at ICCU) due to coronary heart disease. This condition can trigger a systemic inflammatory process that will results in the visceral ischemia reperfusion process and cholecystectomy procedure could reduce the inflammation.

Keywords: Gallbladder, Perforation, Acalculous Cholecystitis

Pre-operative characteristics of gallstone patients that had been performed laparoscopic cholecystectomy during August 2019–2020 at Hasan Sadikin General Hospital Bandung

Nicholas Christian Tinambunan1, Tommy Ruchimat2
1Basic Surgery Training Programme Students, General Surgery Education Programme, Faculty of Medicine, Universitas Padjadjaran, Hasan Sadikin General Hospital Bandung, Indonesia
2Department of Digestive Surgery, Faculty of Medicine, Universitas Padjadjaran, Hasan Sadikin General, Hospital Bandung, Indonesia

Background: Various conditions and characteristic of gallstone patients who undergo laparoscopic cholecystectomy can be encountered preoperatively. The
ABSTRACT

Published by Histologically-pathologically confirmed case of malignant phyllodes tumor, diagnosis of malignant phyllodes tumor and had undergone removal (resection).

Previously, the patient had a history of breast tumors 4 years ago with a tumor in a 37-year-old woman, complaining of a lump in the lower right sites are the lungs, pleura and bones. The tumor barely metastasizes and when it does occur, common Most of these tumors are benign, the frequency of malignant lesions varies grow rapidly and produce substantial tissue pressure, leading to skin necrosis. The patient was placed in the lateral decubitus and make a marker at LD region, then after incision and dissection at axilla, where we found the bundle of thoracodorsalis artery, vein and nerve. The latissimus is divided near its attachment to the humerus The LD myocutaneous to preserve palmar sensation for this procedure is large defect and to provide stable soft tissue coverage and proceed with immediate reconstruction to close defect with LD flap. Indication we send the tumour to pathology anatomy for negative margin and decided to right upper arm with G1T4bN1M0. After we had done wide excision the lesion, we send the tumour to pathology anatomy for negative margin and decided to

Conclusion: Abdominal wall metastases are very rare. The main therapy is complete surgery. The role of radiotherapy and adjuvant chemotherapy remains controversial. The prognosis for metastatic disease is usually poor because of the emerging systemic disease, multiple organ disorders that can occur, and the high rate of recurrence.

Keywords: Phyllodes Tumor, Malignant, Metastatic, Abdominal Wall

Latissimus dorsi flap as immediate reconstruction for upper arm following wide excision in sarcoma

Alfiyannul Akhsan
Surgical Oncology, Nurusyifa Hospital, Central Java, Indonesia

Background: LD flap proved a considerable versatility at the level of the upper arm as well as other anatomical regions. The most common usage of the flap is for breast reconstruction after mastectomy. One of the advantages of LD flap are this flap can replace large defect after surgical action. This study aims to evaluate the latissimus dorsi flap as immediate reconstruction for upper arm following wide excision in

Case Presentation: We reported patient dermato fibrosarcoma protuberans at right upper arm with G1T4bN1M0. After we had done wide excision the lesion, we send the tumour to pathology anatomy for negative margin and decided to

Conclusion: Venous congestion with partial or complete flap loss is the most common complication of this technique, but with good preservation and measurement, surgeon can do this procedure well. LD flap can close the defect even with the large defect at upper arm and can do by general surgeon.

Keywords: Latissimus Dorsi Flap, Reconstruction, Upper Arm, Sarcoma

Microcytic serous cystadenoma of the pancreatic tail

Emilia Rosita, Abdul Mughni
Trainee of Subdepartment of Digestive Surgery, Department of Surgery, Medical Faculty Universitas Diponegoro, Dr. Kariadi Hospital, Semarang, Indonesia

Background: Serous cystadenoma or usually named microcytic serous cystadenoma is a very rare type of benign cystic neoplasm of the pancreas. Pancreatic cystic neoplasms occur in only 1% of the entire pancreatic neoplasms and only about 10% of pancreatic cystic lesions. They can be mucinous (50%),

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ABSTRACT

cystadenoma (30%), or neuroendocrine (20%). The aims of this report are to give the author and the audiences the clinical experiences and considerations to improve the diagnostic and managements of cauda pancreatic cystadenoma tumors.

Case Presentation: We report a 52 years-old female with continuous abdominal pain for 3 months without jaundice or palpable mass and any other abdominal symptoms. We did the diagnostic imaging with abdominal CT that showed solid and cystic mass of the pancreatic cauda with encased the splenic artery. We did the laparoscopic convert to laparotomy, distal pancreatectomy, and splenectomy.

Conclusions: Benign cystic tumor of the pancreatic cauda could be present as a non-specific abdominal pain without jaundice and palpable mass or any other abdominal symptoms. It needs a good and detail anamnesis, physical diagnostic, and imaging to prevent the underdiagnose.

Keywords: Pancreatic Cystadenoma, Pancreatic Tail Tumor

Predictor factors of difficult laparoscopic cholecystectomy in cholelithiasis patients at Mohammad Hoesin Hospital, Palembang

Akbar H, Komar H, Theodorus
Department of Surgery, Faculty of Medicine, Universitas Sriwijaya, Palembang, Indonesia

Background: Laparoscopic cholecystectomy is the gold standard for cholecystectomy and can be performed by trained general surgeons. However, the percentage of complications that occur from cholecystectomy laparotomy is approximately 20 percent. So, it is necessary to research risk factors for complications.

Methods: This research is an analytic observational study with a cross-sectional design using preoperative data and intraoperative findings of laparoscopic cholecystectomy. Age, gender, body mass index, history of cholecystitis, number of stones, and location of stones are identified as predictors that affect the difficulty of laparoscopic cholecystectomy. The data collection was performed at the Mohammad Hoesin Hospital Palembang Department from July 2019–July 2020.

Results: Of the 67 research samples, a Chi-square test was performed, and the factors that had a significant relationship were the body mass index (P=0.000), history of cholecystitis (P=0.000), number of stones (P=0.049), and stone location. (P=0.002). The backward stepwise logistic regression using the four variables showed that the history of cholecystitis had an independent effect (OR-adjusted 28.889; P=0.000).

Conclusion: Cholecystitis had a potential use as predictor factors of difficult laparoscopic cholecystectomy in cholelithiasis patients at Mohammad Hoesin Hospital, Palembang.

Keywords: Difficult, Predictor, Gold Standard, Laparoscopy Cholecystectomy

Management of liver desmoid tumor at Sardjito General Hospital: a case report

Chrisna Budi Satriyo1, Nurcahyo Setiawan2
1Trainee of digestive surgery, Faculty of Medicine, Health, and Nursing, Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia
2Digestive surgeon, Digestive Surgery Department, Faculty of Medicine, Health, and Nursing, Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia

Background: Desmoid Tumor was originated from the fascial or musculoponeurotic tissue. It is a rare benign neoplasm, affecting an estimated 1 to 2 per 500,000 people worldwide. Abdominal wall, shoulder girdle and upper arms are the most common primary site of desmoid tumor. The typical clinical presentation is a painless mass with a slow and progressive invasion of contiguous structures. Surgical resection with a wide margin remains the gold standard treatment.

Case Presentation: We presented a case of a 68-year-old man came to Digestive Surgery Clinic at Sardjito General Hospital in September 2020 with intra-abdominal tumor and has managed as a patient with liver tumor. He was enrolled a clinical, laboratory and radiology examination and defined as liver tumor. A laparotomy resection and partial segmentectomy V-VI right liver lobe was performed and postoperative histopathological examination was held. The result of histopathological examination was desmoid fibromatos. He was in fair condition during inpatient and outpatient caring without any complaints.

Conclusion: Management of desmoid tumor should be considered in diagnosis with complete gross resection and postoperative histopathological examination to obtain the optimal gain.

Keywords: Desmoid Tumour, Intra-Abdominal, Management, Histopathological

Case report: bile duct injury

Stefanus Satria A. Dharma1, Duta Indriawan1, Ahmad Fathi Fuadi2, Abdul Mughni Rozy1
1General Surgery Department, Medical Faculty of Universitas Diponegoro, Dr. Kariadi General Hospital, Semarang, Indonesia
2Digestive Surgery Division, Medical Faculty of Universitas Diponegoro, Dr. Kariadi General Hospital, Semarang, Indonesia

Backgrounds: Bile duct injury (BDI) might happens during the gallbladder surgery. It is associated to 80%-85% cases resulting from laparoscopic cholecystectomy. The incidence might increase up to 3%. From 88 patients, it is obtained only 17% that could be repaired by general surgeon compared to 94% performed by hepatobiliary surgeons in tertiary care facilities. Dr. Kariadi Hospital Semarang has reported 27 BDI cases during January 2017–July 2020. This case study aims to increase the knowledge of surgeons in diagnoses and provides management of BDI cases.

Case Presentation: The 50-year-old female patient was diagnosed with Bile Duct Injury Hannover type A1 after undergoing laparoscopic cholecystectomy, based on clinical signs: pain in epigastrium and right upper abdomen radiating to the back, jaundice sclera, putty faeces and urine like tea colour. ERCP results showed bile leak after laparoscopic cholecystectomy (Hannover type A1) CBD dilation caused by distal CBD stricture suspension and continued with sphincterotomy and stent placement. Post-affective leakage in patients was reduced after ERCP, sphincterotomy and stenting.

Conclusion: In the case of BDI, 90% of injuries cannot be diagnosed during surgery, so it is necessary to recognize the clinical manifestations during the examination.

Keywords: Bile Duct Injury, Laparoscopy Cholecystectomy, Hannover Classification

Spontaneous perforation of the common bile duct in children: very rare case

Gede Pambudi Utomo1, Erwin Wibowo1, Agung Aji Prasetyo2
1Resident of General Surgery, Dr Kariadi General Hospital, Medical Faculty, Universitas Diponegoro, Semarang, Indonesia
2Department of Pediatric Surgery, Dr Kariadi General Hospital, Medical Faculty Universitas Diponegoro, Semarang, Indonesia

Background: Spontaneous perforation of common bile duct (CBD) in children is a very rare case, only about 150 cases are reported from all over the world. The exact cause of perforation is still unclear, delays in correct diagnosis and improper management are associated with high risk of morbidity and mortality.

Case Presentation: A 1-year-old girl was initially brought to another hospital because of nausea and vomiting for 2 weeks. She was treated there for 3 days, but then the complaints grew with fever, stomach distension, unable to defecate and ascites. Abdominal paracentesis was carried out with drain and 400 ml greenish liquid was evacuated. Subsequently, the patient was referred to Dr. Kariadi Hospital and then performed laboratory and MRCP examination. We decided to performed exploratory Laparotomy adhesiolysis and cholecystectomy with Roux-en-Y hepaticojejunostomy.

Conclusion: Spontaneous perforation of CBD is an uncommon and rare cause of acute abdomen case in children. Proper initial diagnosis is the key to good management of patients and is associated with prognosis.

Keywords: Perforation Common Bile Duct, Biliary Peritonitis, Hepaticojejunostomy

Intestine perforation during the onset of acute pancreatitis

Andry Hamdani1, Putra Rachman2
1Department of surgery Universitas Alkhairaat, Anutapura Hospital, Palu, Indonesia
2Department of surgery Universitas Alkhairaat, Anutapura Hospital, Palu, Indonesia

Background: Although rare, this may occur in patients diagnosed with pancreatitis as colonic ileus, obstruction, or perforation. By extension, it may also lead to small bowel obstruction after an episode of acute pancreatitis.

Case Presentation: Here we present the case of a 34-years-old man, who entered the ER with abdominal pain after consuming large amounts of alcohol and was diagnosed with acute pancreatitis. Abdominal ultrasound examination showed signs of intestinal strangulation. Abdomen X-Ray imaging shows multiple air fluid levels with signs of obstruction. Laboratory results of amylase 316 and Lipase 656. During 8 days of treatment, the patient’s condition did not improve, so it was decided to perform an exploratory laparotomy.

Conclusion: Primary repair and drainage was done. Cases of intestine perforation during the onset of acute pancreatitis are rare.

Keywords: Intestine Perforation, Acute Pancreatitis

Comparative study between age and arterio venous fistula location in Airlangga University Hospital period time 1st January 2018 – 31st December 2019

Niko Azhari Hidayat, Henok Nugrahawanto
Department of Surgery, Faculty of Medicine, Universitas Airlangga, Surabaya, Indonesia

Background: Arteriovenous (AV) shunt is established terms to characterize a special kind of vascular accessing patients on hemodialysis (HD). AV shunt have the superior primary patency rates, the lowest rates of thrombosis and require the fewest secondary interventions. The Kidney Disease Outcomes Quality Initiative (KDOQI) recommends that patients who require long-term HD access is the creation of an arteriovenous fistula (AVF), which is associated with improved patients’ survival and reduced morbidity.

Methods: This retrospective study was carried out on total 575 patients over the duration of two years. The fistulae were created using radial artery and cephalic vein (Radio cephalic AVF) and brachial artery and cephalic vein (Brachiocephalic AVF).

Results: Form 575 patients, consist of 284 male (49%) and 291 females (51%). There are 65 female (22%) age < 45 years old and 226 females (78%) ≥45 years old. There are 223 males (79%) ≥45 years old and 61 male (21%) age < 45 years old. There are 43 female age < 45 years old with Radio cephalic AVF and 102 female age ≥45 years old. The patients with Brachiocephalic AVF are 22 female < 45 years old and 124 females ≥45 years old. There are 39 males with Radio cephalic AVF age < 45 years old and 92 male age ≥45 years old. There are 131 male age ≥45 years old with Brachiocephalic AVF and 22 male age < 45 years old.

Conclusion: There is significant result between arteriovenous location and age. The reason of this result, because there are the condition related age and Arteriovenous location. Most people with ≥45 years old have the high-risk factor like sclerotic on their vascular access. The proximal access is suggested with people of ≥45 years old than distal vascular access.

Keywords: Radiocephalic, Arterio Venous Fistula, Vascular Access, Haemodialysis.

A retrospective case evaluation of patient with diabetic foot at Dr. Wahidin Sudirohusodo Hospital

Julcrithno Irwanputra, Mulawardi
General Surgery, Department of Surgery, Faculty of Medicine, Universitas Hasanuddin, Makassar, Indonesia

Background: Diabetes is a major cause of pathology in the legs, causing ulceration of the feet due to neuropathy, infections, and ischemia. WHO predict the increasing numbers of DM type 2 in Indonesia from 8.4 million in year 2000 to 21.3 million in 2030. This study aims to portray the epidemiology of vascular
ABSTRACT

Characteristics in diabetic foot cases at Wahidin Sudirohusodo Hospital in two years.

Methods: Total 229 patient of diabetic foot from January 2017 until December 2018. Personal data, disease classification, laboratory as well as assessed actions of hospital medical records retrospectively.

Results: The number of male sufferers than women 1.3:1, the most sufferers occurred in the sixth decade as much as 41%, the most Wagner classification in Grade 4 is 20%, chance for HbA1C > 6, Smg/dl occurred in 68.6% patients with leucocytosis 71.2%. The actions undertaken were 44.1% Conservative, the operative action carried out in the form of debridement and amputation in 127 patient. With an external mortality rate of 3.9%.

Conclusion: Diabetic foot cases was high due to the higher level and uncontrolled of blood glucose that can be measure by HbA1C. Mortality and morbidity could be reduce with maintained blood glucose controlled.

Keywords: Diabetic Foot, HbA1C, Amputation

Accuracy of spiral laminar flow, spectral broadening and murmurs/thrills as prediction maturity AV-shunt prediction in Dr. Muhammad Hoesin Hospital

Jaka Sefta Perdana, Fahmi Jaka Yusuf, Muhammad Dahlan, Erial Bahar
General Surgery, Faculty of Medicine, Universitas Sriwijaya, Dr. Mohammad Hoesin General Hospital, Palembang, Indonesia

Introduction: Haemodialysis is most often used as renal replacement therapy in addition to peritoneal dialysis or kidney transplant. Vascular access for haemodialysis is important in the management of patients with chronic kidney disease because through this access, the patient’s blood can be transferred to the dialysis filter and returned to the patient in a continuous process, which usually takes three to four hours, two to three times a week. The establishment and maintenance of a dialysis vascular access are important in haemodialysis because the AV shunt is a line of life. AVf is the recommended access for patients undergoing haemodialysis because it tends to last longer, has lower rates of infection, morbidity, mortality and reduces the likelihood of repeated interventions compared to CDL. However, access problems are a major determinant of morbidity among haemodialysis patients. Pre-operative evaluation of the veins and arteries of the upper extremities using Doppler ultrasound is a recommended adjunct, especially in obese patients, who have a history of previous vascular access surgery, or patients with suspected venous or arterial disorders. This study looked at the accuracy of spiral laminar flow (SLF), spectral broadening and murmurs/thrills as predictors of AV-shunt maturity as haemodialysis access in patients at the Vascular Surgery Polyclinic at Dr. Mohammad Hoesin Palembang.

Methods: Prognostic test study conducted on 30 samples at the Vascular Surgery Polyclinic of Dr. Hospital. Mohammad Hoesin Palembang.

Results: Murmur / thrill has high sensitivity and specificity values on days 7 and 21 while SLF and spectral broadening have very high sensitivity (100%) and specificity (66.7%) values in predicting AVF maturase at day 21, and has a significant association with maturase AVF (p <0.001).

Conclusion: Murmur / thrill, SLF and spectral broadening have high accuracy in predicting AVF maturase.

Keywords: AVF Shunt Maturase, Spiral Laminar Flow, Spectral Broadening, Murmur / thrill

Comparison of ICAM-1 levels in diabetic foot with and without COVID-19

Herwen, Hatibie Oley M, Tjandra DE, Langi FLF
1 Resident of General Surgery, Faculty of Medicine, Universitas Sam Ratulangi, Prof. Dr. R.D. Kandou General Hospital, Manado, Indonesia. 2 Plastic And Reconstructive Surgery Department, Faculty of Medicine, Universitas Sam Ratulangi, Prof. Dr. R.D. Kandou General Hospital, Manado, Indonesia. 3 Vascular Surgery Department, Faculty of Medicine, Universitas Sam Ratulangi, Prof. Dr. R.D. Kandou General Hospital, Manado, Indonesia. 4 Epidemiology And Biostatistics Department, Faculty of Medicine, Universitas Sam Ratulangi, Manado, Indonesia.

Background: WHO has declared COVID-19 as a pandemic. Diabetic foot ulcer (DFU) has long healing process, increasing the cost of medical care. Intracellular adhesion molecule-1 (ICAM-1) is an important mediator of cell adhesion in inflammatory process. This study aims to prove the difference in ICAM-1 levels in DFU with and without COVID-19. In addition, this study also wants to know the correlation between ICAM-1 levels and RT-PCR and Rapid test COVID-19.

Methods: The research was conducted at the Surgery Department of Prof. Dr. R.D. Kandou Hospital Manado from March to June 2020. A cohort study (observational analytic) divided 10 DFU without COVID-19 and 10 DFU with COVID-19. All patients were undergoing a complete procedure of screening COVID-19 and ICAM-1 levels that were measured before and after debridement.

Results: There were more men than women. The mean age was 53 ± 12 years. ICAM-1 levels were able to differentiate DFU with reactive and non-reactive rapid tests (median 312.5 vs 130.3; p <0.001) both pre and post debridement (median 308.0 vs 120.1 ng / mL; p <0.001). ICAM-1 levels of DFU with positive RT-PCR swab test results were significantly higher than those with negative RT-PCR swab test results (median 317.2 vs 149.2; p <0.001). The reduction in ICAM-1 levels was significant in all patients after debridement (median 312.5 vs 130.3; p <0.001).

Conclusions: ICAM-1 levels can be used as an initial screening for COVID-19 infection in DFU. The compatibility of the results of ICAM-1 levels according to RT-PCR was still better than the Rapid test COVID-19.

Keywords: ICAM-1, DFU, COVID-19, DEBRIDEMENT.

The Effect of Blood Pressure on Arteriovenous Fistula (AVF) Maturation within Eight Weeks in End-Stage Chronic Renal Failure Patients with Type 2 Diabetes Mellitus

Hilman Ibrahim, Akhamad, Umayah Asnandri
Department of Surgery, Faculty of Medicine, Universitas Indonesia, Cipto Mangunkusumo Hospital, Jakarta, Indonesia

Background: This study is a preliminary study to see the effect of systolic and diastolic blood pressure on arteriovenous fistula maturation (AVF) within eight weeks in end-stage chronic renal failure patients with type 2 diabetes mellitus, in the future this study can be considered as reference in making AVF access in the Vascular Surgery division of RSCM.

Methods: This study was conducted with a historical cohort design at the Division of Vascular Surgery Department of the Faculty of Medicine, Universitas Indonesia Cipto Mangunkusumo Hospital, Jakarta, Indonesia. We are using...
consecutive sampling, all patients with end-stage chronic kidney disease with type 2 diabetes mellitus that have planned for hemodialysis with brachiocephalic AVF vascular access.

Results: There were 64 subjects with chronic renal failure with type 2 diabetes mellitus undergoing brachiocephalic access insertion procedures. There are 75% of mature subjects were enrolled. The mean preoperative systolic pressure between the two groups showed the maximum number was 165.15 mmHg and minimum was 123.19 mmHg for the mature group, and we also found the maximum number is 164.65 mmHg and the minimum 125.26 mmHg for the immature group with P value 0.922. The mean preoperative diastolic pressure between the two groups, where the maximum number was 93.04 mmHg and the minimum 72.6 mmHg for the mature group and the maximum number is 90.34 mmHg and the minimum 75.78 mmHg for the immature group. The result was statistically not significant with P value 0.982.

Conclusion: Preoperative systolic-diastolic blood pressure has no significance relation on the maturity of the brachiocephalic AVF in patients with end-stage chronic kidney disease with type 2 diabetes mellitus.

Keywords: Blood Pressure, AV Fistula Maturity, Brachiocephalic, Chronic Kidney Disease, Diabetes Mellitus

Characteristics of Diabetic Foot Ulcer (DFU) patients with major amputation procedure at vascular & endovascular surgery department of Dr. Hasan Sadikin Hospital Bandung period 2017-2019

Vashti Resti Putri Firdaus1, Teguh Marfen Djajakusumah2

1 General Surgery Resident, Dr. Hasan Sadikin Hospital, Universitas Padjadjaran, Bandung, Indonesia
2 Vascular and Endovascular Surgery Consultant, Dr. Hasan Sadikin Hospital, Universitas Padjadjaran, Bandung, Indonesia

Background: The cases of diabetes mellitus in this world have been escalating over the time. As the most cases in the world, Indonesia ranked in 7th place with 8.5 million cases and predicted will take a 6th place with an estimated 14.1 million cases in 2035. Diagnosis of Diabetic Foot Ulcer (DFU) must be based on two things, the findings of abnormalities in peripheral nervous system (neuropathy) and vascular disorders in the form of PAD. The management of DFU can be conservative debridement (outpatient) to minor/major amputation, depends on the wound severity in order of live saving and limb salvage. This study aims to determine the characteristics of patients with Diabetic Foot Ulcer (DFU) who undergo major amputation in the Vascular & Endovascular Surgery Department of Dr. Hasan Sadikin Bandung Hospital for the period 2017-2019.

Methods: The type of data collected is secondary data acquired from the inpatients medical records with a DFU diagnosis and undergo major amputation in the Vascular & Endovascular Surgery Department of Dr. Hasan Sadikin Bandung during 2017-2019. Data obtained from the examination of research subjects, including: (1) Subject characteristics such as gender, age, education level, and comorbid factors, (2) Examination of temporary blood glucose levels, (3) Infection predicting factor like leukocyte, (4) Clinical examination, particularly the wound area based on Wagner’s classification, (5) Vascular examination in the form of an ankle brachial index, (6) Comprehensive physical examination like USG doppler, and (7) The indication of amputation.

Results: In this study, there are 84 cases of DFU patients who were performed a major amputation. Based on the demographics, the percentage of DFU patients were 65.5% of women, elderly (55-65 years old), high school education background (35.7%), and had a comorbid factor, like sepsis (44.1%). The highest proportion was obtained when the blood glucose level was > 200 mg / dl (52.4%), the number of leukocytes > 10,000/mm3 (89.3%), the highest proportion was grade 4 of Wagner’s classification, (55.7%), the ankle brachial index examination was difficult to assess due to pain (48.8%). The result of Doppler ultrasound examination was blood vessel disorder (69.1%) and the indication of amputation was dangerous (44.1%).

Conclusion: The principle of DFU management is wound care specifically for an early-stage wound so that the wound can quickly recover. The main components of the management consist of treat the underlying disease, ensuring adequate blood supply, local wound healing, and infection control.

Keywords: Diabetic Foot Ulcer, Peripheral Arterial Occlusive Disease, Atherosclerosis, Wagner classification.

Correlation neutrophil-lymphocyte ratio and platelet-lymphocyte ratio compared to D-Dimer as diagnostic test deep vein thrombosis

Kadek Yuda Sujana1, Nyoman Semadi1, Tjokorda Gde Bagus Mahadewa3

1 General Surgery Specialist Program, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia
2 Department of Cardiothoracic Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia
3 Department of Neurosurgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia

Background: Deep vein thrombosis (DVT) is a blood clot that occurs in the inner veins caused by heart disease, infection, cancer, and prolonged immobilization of the limbs, especially of the lower extremities. Platelet Lymphocyte Ratio (PLR) was a marker of the primary haemostasis process and the inflammatory pathway. NLR and PLR as screening and diagnostic tools compared to D-Dimer can be used as an alternative inspection.

Methods: This study was a diagnostic test conducted for one year at the Sanglah Hospital in Denpasar and had received ethical clearance. The study sample consisted of 49 patients with suspected DVT originating from a population who met the inclusion and exclusion criteria. Data collection and data analysis were performed.

Results: From this study, the NLR sensitivity results in the diagnosis of DVT 74.3% while PLR 76.9%. The specificity of NLR and PLR obtained the same value which is 90%. The positive predictive value of NLR in the diagnosis of DVT patients was 96.6% and PLR 96.7%. The negative predictive value of NLR in the diagnosis of DVT patients was obtained 47.3% and PLR 50%. The prevalence ratio is NLR 1.8 and PLR 1.9. The accuracy of NLR in the diagnosis of DVT patients was 77.5% and PLR 79.5%. The cut point of NLR 8.2 and PLR 159.66. The correlation of NLR and PLR obtained the same value which is 90%. The positive predictive value of NLR in the diagnosis of DVT was 96.6% and PLR 96.7%. The negative predictive value of NLR in the diagnosis of DVT patients was obtained 47.3% and PLR 50%. The prevalence ratio is NLR 1.8 and PLR 1.9. The accuracy of NLR in the diagnosis of DVT patients was 77.5% and PLR 79.5%. The cut point of NLR 8.2 and PLR 159.66. The relationship between NLR and PLR combination on DVT with value r=0.532; p-value 0.001 on DVT incidences.

Conclusion: D-Dimer in this study was still a standard supporting examination before Doppler ultrasound performed because the results of the study show the D-Dimer sensitivity value was higher than NLR and PLR. However, NLR and PLR...
have several advantages, such as better specificity values and better positive predictive values. NLR and PLR can be used as an alternative to DVT diagnostic tools that are easy, inexpensive, simple and widely available in Indonesia.

**Keywords:** NLR, PLR, D-Dimer, Deep Vein Thrombosis

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**Spontaneous migration of catheter tip of Totally Implantable Venous Access Port (TIVAP) from right internal jugular vein to right atrium**

I Wayan Suwarna¹, Hendry Irawan³, Putu Anda Tusta Adiputra³

¹Surgical Training Program, Department of Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Denpasar, Indonesia
²Trainee of Surgical Oncology, Department of Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Denpasar, Indonesia
³Surgical Oncology Division, Department of Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Denpasar, Indonesia

**Background:** The use of Totally Implantable Venous Access Port (TIVAP) has been increasingly popular in accessing chemotherapy of cancer patients. However, there are still many complications in its implantation. The complications that occur can be divided into short-term complications and long-term complications. Therefore, we report a rare case of a false route of the TIVAP catheter from the subclavian vein to the internal jugular vein with spontaneous migration to the right atrium.

**Case Presentation:** Female 51-years-old underwent TIVAP implantation through the right vein subclavian, but it occurred a false route towards the right internal jugular vein that was supposed to be to the right atrium. In this case, there was no revision taken directly. The access for chemotherapy was still used with slow bolus and observed periodically. There was no complication found in this case and when the chest radiograph was performed in the next one month, the catheter tip migrated spontaneously to the right atrium.

**Conclusion:** TIVAP installation does not have to be revised immediately when a false route occurs, but periodic observation of complications that occur and administration of chemotherapy drugs can be done slowly.

**Keywords:** TIVAP, Complication, False Route, Spontaneous Migration

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**Fat embolism syndrome**

Muhammad Reza Azriyantha, Roni Eka Sahputra

Surgery Department of Medical Faculty, Universitas Andalas, Dr. M. Djamil General Hospital Padang, Indonesia

**Background:** FES is frequently associated with orthopaedic trauma, with the highest incidence in closed long bone fractures of lower limb. Here, we report FES in patient with multiple fracture.

**Case Presentation:** A 22-years-old male admitted to ER with pain in right thigh, and right and left lower limb since 2 days before admission after traffic accident. Patient was conscious and vital signs were normal. X-ray examination showed fractures of right sub trochanter, and middle third of left and right cruris. 6 hours after admitted to ward, patient experienced breathlessness, decreased consciousness (GCS 9; E2M5V2) and unstable vital signs. Petechias were found around neck, upper chest and axilla. Patient was given adequate oxygen and fluid resuscitation. Laboratory studies showed sudden anemia and thrombocytopenia. Head CT scan and chest X-ray were normal. Patient was treated with heparinization and corticosteroid. On the 7th day, vital signs and consciousness improved, and ORIF was scheduled on the 9th day and was discharged in stable condition.

**Conclusion:** Diagnosis of FES is based on neurological symptoms, hypoxemia, tachycardia, petechiae, and no evidence of brain injury, sepsis, cardiogenic pulmonary edema or ARDS. Early surgical fixation in patient with isolated femur fracture may prevent the development of FES.

**Keywords:** Fat Embolism Syndrome, Multiple Fractures

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**Relationship between Platelet Lymphocyte Ratio (PLR) and Neutrophil Lymphocyte Ratio (NLR) and amputation post endovascular intervention in Rutherford 2–4 peripheral artery disease patients at Sanglah General Hospital Denpasar**

Ade Sinyo Aristantrisna¹, Ketut Putu Yasa³, I Gede Raka Widiana³

¹Department of Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital Denpasar, Indonesia
²Department of Thoracic and Cardiovascular Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital Denpasar, Indonesia
³Department of Internal Medicine, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital Denpasar, Indonesia

**Background:** Endovascular intervention is one of the efforts to reduce amputation number on PAD patient. With the limitation of facility and doctors, make the treatment for PAD became less effective. New study shows correlation between platelet lymphocyte ratio (PLR), neutrophil lymphocyte ratio (NLR) and PAD. Increase number of platelet and neutrophil with decrease number of lymphocytes on atherosclerosis process, correlate with bad prognosis for PAD patient. Curious to know about any significant correlation between PLR, NLR and amputation after endovascular intervention on PAD Rutherford 2-4. We conduct the study to learn if PLR and NLR can be used for determine the prognosis of this disease.

**Methods:** This research is an observational analytic study using a cross sectional study. The research was conducted in Sanglah Hospital Medical Report room Denpasar, using patient medical report from January 2014 to December 2018.

**Results:** From 56 samples showed that the value of PLR ≥ 140,5 have 2.4-time higher risk amputation and NLR ≥ 3,14 have 3.9-time higher risk amputation

**Conclusion:** PLR and NLR are associated with amputation after endovascular intervention in PAD Rutherford 2-4

**Keywords:** PLR, NLR, PAD Rutherford 2-4, Endovascular Intervention, Amputation.
Malformation of subclavian arteriovenous in children

Allen Anderson Pattipeilohy, Ida Bagus Budiarta
Department of Vascular Surgery, Faculty of Medicine, Universitas Udayana, Denpasar, Indonesia

Background: Arteriovenous malformations (AVM) that occur extra-cranial are less common compared to intracranial lesions. The potential for this expansion of AVM throughout life with soft tissue invasion, bleeding, deformity, and functional deficits has caused much attention in terms of management.

Case Presentation: We report a case of AVM shoulder in a boy. A 9-month-old boy is referred to bleeding due to an infected right shoulder ulcer since the age of 1 month. An angiogram performed previously shows right shoulder AVM. It is clear that excision is an appropriate treatment because the location is easily accessible and there is no extension to the thickened area or neck. The patient has a good prognosis after extensive excision.

Conclusion: Excision procedure provide a favorable outcome to the patient with malformation of subclavian arteriovenous.

Keywords: Arteriovenous Malformation, Shoulder, Extracranial, Excision, Subclavian

Use of AV graft in patients with stage V of Chronic Kidney Diseases (CKD)

Muhammad Ryan SA, Hippocrates Kam
Department of Surgery, Faculty of Medicine, Universitas Andalas, Dr. M Djamil General Hospital Padang, West Sumatera Province, Indonesia

Background: Hemodialysis is a treatment for patients with a diagnosis of kidney failure where the process uses a machine to send the patient’s blood through a filter (called a dialyzer). Access for hemodialysis can be used, among others: Arteriovenous (AV) shunt, Arteriovenous Fistula (AVF), Arteriovenous Graft (AV Graft) as permanent access. Meanwhile, CDL (Catheter Double Lumen) is used for temporary access (3 months/1 year). AV This case study aims to evaluate the use of AV graft in patients with stage V of Chronic Kidney Diseases (CKD).

Case Presentation: In the case report of a 48-year-old female patient diagnosed with CKD Stage V on HD. Patients with a history of AV shunt surgery in all four parts of the upper limb (left RC and left BC, right RC and left BC), but access failed. On Doppler ultrasound examination, a small diameter of the basilic vein was found in the patient. And it was decided to do AV Graft surgery as access for hemodialysis. About 4 weeks after the AV graft action, Doppler control ultrasound examination was performed, and the results were that the volume flow was above 600 ml/minute and the puncture was successful for hemodialysis.

Conclusion: The use of AV graft shows a favorable outcome in patients with stage V of CKD.

Keywords: AV Graft, Hemodialysis, CKD

The characteristic of hemangioma at Dr. Mohammad Hoesin Hospital Palembang January–December 2019

Eka Kurniawan Perangin-Angin1, Mufida Muzakkie2
1 Resident of the Division of Surgery, Faculty of Medicine, Universitas Sriwijaya, Dr. Mohammad Hoesin Central General Hospital, Palembang, Indonesia
2 Staff of The Division of Plastic, Reconstructive, and Aesthetic Surgery, Surgical medical staff group, Faculty of Medicine, Universitas Sriwijaya, Dr. Mohammad Hoesin Central General Hospital, Palembang, Indonesia

Background: Hemangioma is a form of vascular anomaly that has various characteristics. Characteristics data, region, size of lesion, complications, and choice of treatment both operative and non-operative in hemangioma patients, especially at the Dr. Mohammad Hoesin General Hospital, Palembang. This study aims to collect data and evaluate it.

Methods: This study used secondary data which is medical records of all hemangioma cases treated at Dr. Mohammad Hoesin General Hospital Palembang on January 1, 2019 to December 31, 2019. Data analysis used descriptive analysis, where the data that has been collected will be grouped and presented in the form of a frequency distribution table for each characteristic.

Results: There were 61 medical records that meet the study criteria. The age at diagnosis was 2 (range 0–8) weeks. The number of female patients (n=34; 55.74%) was found to be more than men (n=27; 44.26%). Infantile hemangiomas (n=39; 63.9%) were found to be more common than congenital hemangiomas (n=22; 36.1%). Most of the hemangiomas were in the face (n=36; 59%). The median size of hemangioma lesions in this study was 3 (range 0.5–10) cm. There were 18 hemangioma lesions that had complications (29.5%). The majority of hemangioma patients underwent operative management (n=47; 77%), others underwent non-operative management (n=14; 23%).

Conclusion: Hemangiomas are found commonly in female patients. The location of the lesion is predominantly in the facial area. Nearly a third of hemangioma lesions have complications with the most common complication were ulcers. Hemangioma management was dominated by operative management which may be associated with a large number of hemangioma lesions in sensitive locations and complications.

Keywords: Hemangioma, Hemangioma Characteristic

Evaluation of outcomes following infrapopliteal angioplasty with plain old balloon in patients with critical limb threatening ischemia at General Hospital of Dr Ciptomangunkusumo

Rini Yolanda, Patrianef, Akhmadu Muradi, Dedi Pratama
Division of Vascular and Endovascular Surgery, Department of Surgery, Faculty of Medicine, Universitas Indonesia, Dr. Cipto Mangunkusumo National General Hospital, Jakarta, Indonesia

Background: Endovascular treatment is the main management for infrapopliteal disease in critical limb threatening ischemia (CLTI) patients. In Indonesia, especially at Dr Cipto Mangunkusumo National General Hospital, plain old balloon angioplasty (POBA) is the most common method
ABSTRACT

of endovascular treatment. Yet, there is still no evaluation of the method’s outcomes. Therefore, this study is aimed to evaluate such treatment and find factors affecting the outcomes.

Methods: The study was a retrospective cohort study using medical records from patients who underwent plain old balloon angioplasty between January 2013 and May 2017. We collected data on patients' demography, clinical factors, and outcomes such as restenosis, amputation, and wound healing within 1-year post treatment. Each was analyzed descriptively and analytically. Chi square test or Fischer test for categorical data and nonpaired T test or Mann Whitney test for numerical data were conducted to find the relationship between demographical and clinical factors towards the outcomes of angioplasty treatment.

Results: There are 28 subjects on this study. At one-year post treatment, we found 53.6% of patients experiencing restenosis, 50% had amputations and 46.4% had delayed wound healing. Factors affecting the wound healing outcome were Rutherford stage before treatment (p=0.030) and history of coronary artery disease (p=0.014).

Conclusion: Plain old balloon angioplasty treatment in patients with critical limb ischemia cannot yet be claimed as having good outcomes considering the incidence of restenosis, amputation, and wound healing.

Keywords: Outcomes Evaluation, Plain Old Balloon Angioplasty, Critical Limb Threatening Ischemia, Restenosis, Amputation, Wound Healing

Oncology Surgery

A contradiction in pathological evidence and clinical finding of malignant suspected giant phyllodes tumor: a case presentation

Eric Kurniawan Gianto1, Bambang Rishardana2

1General Practitioner, Karsa Husada Kota Batu Public Hospital, Indonesia
2General Surgeon, Karsa Husada Kota Batu Public Hospital, Indonesia

Background: Phyllodes tumors are rare fibroepithelial tumors for only 0.3 to 1% of all breast tumor. The tumor presenting as giant phyllodes tumor was an even more rare presentation. WHO has classified them as benign, borderline and malignant. Suspicion to malignancy can be seen through easy clinical finding such as tumor growth rate. However, the certainty of diagnose and therapy based on pathological.

Case Presentation: A 39-year-old female came to the surgical department with right breast enlargement for 2 years. At first, it was just a lump about 2 cm of diameters. The lump continued to increase in massive size over this couple of years. Physical exam revealed the right breast with a diameter of 28 cm. Pathological readings show that the result is benign phyllodes tumor. The operative procedure used at that me was radical mastectomy.

Discussion: WHO classification of phyllodes tumors is based on stromal cellularity, cellular atypia, stromal overgrowth, tumor necrosis and mitotic activity. The median size of phyllodes tumors is 4 cm. Only 20% of phyllodes tumors grow larger than 10 cm which called giant phyllodes tumor. The alternative to clinically predict tumor malignancy by knowing the tumor growth rate. Pathological assessment is still the first due to its sensitivity to be 99% respectively for the diagnosis.

Conclusion: Rapidly growing or malignant suspected giant tumors as clinical finding often confuse the practitioner to determine malignancy. In case of phyllodes tumor, the consideration of action is based on pathological classification rather than clinical finding.

Keywords: Phyllodes Tumor, Pathological, Classification, Clinical Finding, Doubling Time

A rare case: torsion of malignant giant ovarian cyst (juvenile granulosa cell tumor) in 6-year-old girl

Bambang Rishardana1, Widdi Hatmaka2, Dian Yuliarti Lestari3, Bertiana4

1General Surgeon, General Surgery Department of Hasta Husada Hospital, Kepanjen, East Java, Indonesia
2Obstetrician, Obstetrics and Gynecology Department of Hasta Husada Hospital, Kepanjen, East Java, Indonesia
3Pathologist, Pathology Department of Hasta Husada Hospital, Kepanjen, East Java, Indonesia
4Radiologist, Radiology Department of Hasta Husada Hospital, Kepanjen, East Java, Indonesia

Background: Ovarian cyst is an organic mild tumor. The manifestation can be
adnexal torsion with acute abdominal that can be very painful and the patient can be so weak. This case study aims to determine the torsion of malignant giant ovarian cyst (juvenile granulosa cell tumor) in 6-year-old girl. **Case Presentation:** We are reporting a 6–year-old female child who in prepuberty. She was presenting muscular defense of the abdomen, distended, and a decreased bowel sound. The ultrasound couldn’t see the cyst clearly. The ultrasonography conclusion was acute antecaeal appendicitis with possibility of retrocecal appendicitis, fluid collection complex from cavum pelvic to cavum abdomen, ascites and mild hydropneumorphosis post renal. Using laparotomy exploration, we found adnexal torsion of left ovarian giant cyst with 15 cm of length and 7 cm of width. The histological test after excision of the adnexal was showing juvenile granulosa cell tumor. **Conclusion:** Juvenile granulosa cell tumor is a rare case in children and comprehensive management is necessarily needed based on clinical findings. **Keywords:** Giant ovarian cyst, Ultrasound, Laparotomy Exploration, Adnexal Torsion, Histological Test

**Positive lymph nodes and infiltration to skin and chest wall are the most relevant associated variables with risk of distant metastasis in breast cancer after surgery**

**Sumandi Lukman Anwar, Teguh Aryandono**
Department of Surgery, Faculty of Medicine, Universitas Gadjah Mada, Yogyakarta, Indonesia

**Background:** Patterns and risk factors associated with the development of distant metastasis in the population of patients with delayed diagnosis and advanced stages at diagnosis such as in Indonesia are not yet fully known. After completing surgery and multimodality treatment, more than a quarter of breast cancer patients including those that are diagnosed in early stages will develop distant metastasis.

**Methods:** Non-metastatic breast cancer patients (n=1059) admitted to our institute (2014-2017) were analyzed to identify the metastatic patterns and the associated risks. Demographic, clinical, and pathological data were recorded and analyzed for any association with risk of distant metastasis using logistic regression tests.

**Results:** Skin and chest wall cancer infiltration was significantly associated with distant metastasis (OR2.115, 95% CI: 1.544-2.898) particularly in Luminal A-like subtype (OR 2.685, 95% CI: 1.649-4.371). Positive axillary nodes were also significantly associated with the risk of distant metastasis (OR1.855, 95% CI: 1.319-2.611) and the elevated risk was significantly associated in the Luminal A-like subtype (OR 2.572, 95% CI: 1.547-4.278). Bone metastasis was significantly higher in the Luminal A-like subtype than other breast cancer subtypes (OR 1.601, 95% CI: 1.106-2.338). The combination chemotherapy of anthracyclines and taxanes was significantly correlated with lower distant organ spread compared to solely anthracycline-based chemotherapy (OR 0.510, 95% CI: 0.355-0.766) and the higher effects were observed in Luminal A-like subtype (OR 0.417, 95% CI: 0.226-0.769). Stratification of breast cancer patients into Luminal and Non-Luminal subtypes showed a significantly higher risk of bone metastasis in Luminal subtype (OR 1.793, 95% CI: 1.209-2.660) and pulmonary distant spread in non-Luminal breast cancer (OR 1.445, 95% CI: 1.003-2.083).

**Conclusion:** Clinopathological variables and stratification of breast cancer using hormonal and Her-2receptors were useful not only to aid the treatment plan but also to identify risk factors associated with distant metastasis. Our study suggests a new perspective to identify breast cancer patients with a higher risk of distant metastasis that might be used to plan more intensive surveillance or escalation treatment in a population of patients with advanced stages at diagnosis.

**Keywords:** Metastasis, Breast Cancer, Subtypes, Luminal, Triple-Negative

**Correlation of CD44 and CD24 expression with positive response after neoadjuvant chemotherapy in breast cancer patient stage IIIB**

**Bachtiar Budianto, Artono Isharanto, Andry Haris**
Department of Surgery, Faculty of Medicine, Universitas Brawijaya, Malang, Indonesia

**Background:** Breast cancer happens due to abnormal cell growth of breast tissue. CD44 expression initiates the growth of the tumor by binding with receptors such as tyrosine kinase. CD24 is a protein molecule that is responsible for the proliferation of tumor cells and an increase of this protein can cause metastasis. This study aims to evaluate the responsiveness of stage 3 breast cancer to chemotherapy by measuring the expression levels of CD44 and CD24 molecules.

**Methods:** Observational research with pre- and -post-intervention or test research types. Performed on 49Luminal Stadium IIIB subtype breast cancer patients who received 3 series of neoadjuvant chemotherapy at RSUD dr. Saiful Anwar Malang and immunohistochemical examination and painting on tissue specimens from the biopsy results.

**Results:** Paired t-test and discriminant analysis were performed. The results of the paired t-test in this study showed the value of p-value between CD44 and CD24 expression before chemotherapy with CD44 andCD24 expression after chemotherapy was given. 0.501> 0.05 and sig. 0.097> 0.05 showed no significant differences. The results of the discrete analysis in this study showed that the expression of CD44 and CD24 could not be a predictor of chemotherapy response.

**Conclusions:** CD44 and CD24 have a very important role in the physiologic and pathological process, including cell adhesions, inflammation, and tumour development. We found that there is a difference between both expressions but not significant from CD24 and CD44 expressions in primary breast cancer before and after chemotherapy.

**Keywords:** CD44, CD24, Expression, Breast Cancer

**Fibrodenoma management with ultrasound-guided vacuum assisted breast biopsy in Surakarta, Indonesia**

**Kristanto Yuli Yarsa, Mudib**
Department of Surgery, Faculty of Medicine, Universitas Sebelas Maret, Surakarta, Central Java, Indonesia

**Background:** Fibrodenoma is the most benign breast tumor. The conventional management with open surgery requires postoperative care and leaves a scar. It has been shown that Vacuum Assisted Breast Biopsy (VABB) as a minimally
ABSTRACT

Invasive measure can be used for both diagnostic and curative measures.

**Methods:** Patients diagnosed with fibroadenoma were excised with an ultrasound-guided VABB. The procedures were performed under general anesthesia by the surgical oncologist.

**Results:** A total of 16 patients with 32 fibroadenoma lesions were excised with ultrasound-guided VABB. The mean age of the patients was 29.8 years (a range of 20–58) with a mean lesion size of 2.84 cm (1–6 cm). It was found that 6 patients had 1 tumor, 5 patients had 2 tumors, 3 patients had 3 tumors, and 2 others had 4 tumors. Most tumors were in the superolateral (40%) and inferolateral (25%) quadrants. The ultrasound evaluation showed a complete excision. The pathological results showed that all lesions were fibroadenoma with no serious complications. About 1 patient had hematoama requiring aspiration. The patient was satisfied with the postoperative appearance.

**Conclusion:** VABB is effective and safe for the management of fibroadenoma up to 6 cm in size.

**Keywords:** Fibroadenoma, Vacuum Assisted Breast Biopsy, Ultrasound-Guided Biopsy

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**Neuroendocrine tumours primary location pattern: serial case Dr. Sardjito General Hospital between 2018-2019**

**Ucca Primadewa, Sofia Pranacipta, Irianiwati, Yuda Handaya**

Department of Surgery, Faculty of Medicine, Universitas Gadjah Mada, Yogyakarta, Indonesia

**Background:** Neuroendocrine tumors (NETs) are a group of heterogeneous tumors originating from diffuse endocrine system. Some tumors can produce peptides or neuroamines. There are currently no data related to the incidence and location pattern of neuroendocrine tumors in Indonesia. This study aims to identify epidemiological data and primary location of neuroendocrine tumors in patients treated in Dr. Sardjito General Hospital between 2018-2019.

**Methods:** A total of 19 patients were diagnosed with NETs during 2018 and 2019 in Dr. Sardjito Hospital. The diagnosis was based on biopsy and histopathological examination of the tumor.

**Results:** In 2018-2019, 19 cases of neuroendocrine tumors were found in Dr. Sardjito Yogyakarta Hospital. The median age of subjects was 49 years ranging from 17-77 years. The proportion of men (52.6%) is slightly higher than that of women (47.4%). The most frequent primary neuroendocrine tumors were found in stomach (31.6%), followed by pancreas (26.3%), and hepatobiliary (15.8%). A total of 2 out of 19 patients (10.5%) had primary tumors in the ileum, whereas in the duodenum, appendix, and rectum each only one case was found.

**Conclusion:** The most common primary sites for neuroendocrine tumors are stomach, followed by pancreas, and hepatobiliary tissue, the rest are found in the ileum, duodenum, appendix, and rectum. Further research is much needed to determine the epidemiology and primary location patterns of neuroendocrine tumors in Indonesian populations.

**Keywords:** Neuroendocrine Tumours, Primary Location, Pattern

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**Colorectal cancer patients’ characteristics in Prof. dr. R D. Kandou Hospital, Manado, Indonesia**

**Ferdinand Tjandra, Jeffri, Michael Tendean, Enrico Napitupulu**

Department of Surgery, Faculty of Medicine, Universitas Sam Ratulangi, Manado, Indonesia

**Background:** Cancer is one of the major health problems in Indonesia and globally. It is the 3rd most common form of cancer in the world, and second leading cause of death. Colorectal cancer in particular can reduce the quality of life, increase length of stay and causing death. Knowledge of patient’s characteristics play a major role in early diagnosis, aggressive treatment, and the involvement of chemotherapy and radiotherapy. Surgical management is effective in isolated tumor, but chemo and radiotherapy provide adjuvant upon with advance stages and recurrences. This study aims to assess the characteristics of colorectal cancer patients in Prof. dr. R. D. Kandou Hospital, Manado.

**Methods:** Secondary data collection was carried out from all colorectal cancer outpatients seeking treatment in Prof. dr. R. D. Kandou Hospital in 2017-2020.
and descriptive analyses was held to determine patients' characteristics.

**Result:** A total of 102 patients were diagnosed with colorectal cancer, using C20 ICD X. Sixty-one patients (59.8%) were male patients. Highest rate in age group of 50-60 yrs. (37.3%) and >60 yrs. (36.3%). The most common chief complaint was bloody bowel movement as high as 56.9%. Most surgery performed was Miles Procedure (18 cases) and sigmoidecotomy (14 cases). In addition, 41.2% patient undergo chemotherapy and 11.8% following radiotherapy. Total mortality rate as high as 11.8%.

**Conclusion:** Colorectal cancer is still a major problem in our health system, which mostly occurs in the elderly with a high mortality rate, reaching 11.8%.

**Keyword:** Colorectal Cancer, Mortality, Characteristics

Impact of tumor size and lymph node involvement on pathological response in patients with locally advanced breast cancer after neoadjuvant chemotherapy administration

Amal Fathullah Pua Upa¹, Herjuna Hardiyanto²

¹Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia
²Department of Surgery, Division of Oncology Surgery, Dr. Sardjito General Hospital, Yogyakarta, Indonesia

**Background:** Locally advanced breast cancer (LABC) covered 40-60% of all breast cancer cases when diagnosed in developing countries. Neoadjuvant chemotherapy (NAC) is a standard of care for LABC to achieve total tumor resection. Pathological response after NAC had been linked to survival improvement in patients. Biomarkers identification as predictors for this pathological response is necessary. Tumor size and involvement of lymph nodes were analyzed as predictor factors to attain pathological response in LABC after NAC administration.

**Methods:** This retrospective study was conducted from August 2019 until November 2019 in Dr. Sardjito General Hospital Yogyakarta. Tissue sample and immunohistochemistry (IHC) examination were collected from 27 patients of locally advanced breast cancer (LABC) who were treated with neoadjuvant chemotherapy (NAC). The endpoint of this study was response rate according to pathological response after NAC administration. The data were analyzed using SPSS version 21.

**Results:** Clinical tumor size showed no relationship with pathological response (p-value= 0.25) after neoadjuvant chemotherapy (NAC) administration. Clinical lymph node involvement also had not been proved as a predictor factor to attain pathological response (p-value=0.69) in patients with locally advanced breast cancer (LABC) who underwent neoadjuvant chemotherapy (NAC).

**Conclusion:** This study showed no significant association between tumor size and pathological response in patients with LABC after NAC administration. Lymph node involvement also played no role as a predictor factor for pathological response in LABC patients.

**Keywords:** Tumor Size, Lymph Node, Pathological Response, Breast Cancer, Neoadjuvant Chemotherapy

The comparison between Songket and Stewart incision design towards the total drain volume of postoperative Modified Radical Mastectomy (MRM) CA mammae patients at Dr. Mohammad Hoesin Hospital, Palembang

Meigi Medika¹, Nur Qodir²

¹Surgery Resident, Medical Faculty, Universitas Sriwijaya, Dr. Moh. Hoesin Hospital, Palembang, Indonesia
²Oncology Surgery Consultant of Surgery Department, Medical Faculty, Universitas Sriwijaya, Dr. Moh. Hoesin Hospital, Palembang, Indonesia

**Background:** In 2018, breast cancer was the most common malignancies in women. The main modality for the management of breast cancer is surgery. The most frequently-used incision design is Stewart incision. Its disadvantages include the difficulty to access axillary, surgical scar, lateral ear dog and the loss of anterior axillary fold. Another design used is Songket incision design which consists of crescent incision, rule of half buried mattress suture technique and axillary anker suture. This study aims to compare the total drain volume of post-MRM breast cancer patients between Songket and Stewart incision design.

**Methods:** Clinical randomized control trial (cRCT) research is the most robust design for evaluating the interventions used. Samples were all post-Modified Radical Mastectomy Ca Mammae patients with Songket and Stewart incision design who were hospitalized in the Department of Surgery at Dr. Mohammad Hoesin Hospital Palembang in the me of June - November 2019. The inclusion criteria were Ca Mammae patients who underwent the procedure and agreed to participate for this study. The patients who had post-operative wound dehiscence, under-documented drains, or the history of axillary lymph node surgery were excluded from this study.

**Results:** Total drain volume for post-MRM using Stewart incision was 613.85 ± 215.93 ml, while Songket incision stood was 116.15 ± 139.95 ml. The mean age of the study subjects was 48.69 ± 9.57. BMI was 23.65± 3.51 on average. Total drain volume of Stewart incision design was 497.7 ± 75.98 higher than Songket incision design.

**Conclusion:** There was found significant difference in total drain volume between the two groups with p-value of <0.001.

**Keywords:** Ca Mammae, Modified Radical Mastectomy, Stewart Incision, Songket Incision

Neutrophil-lymphocyte ratio as predictor factor of metastatic risk in subtype of different carcinoma mammae

Heru Yudanto¹, Teguh Aryandono², Sumadi Lukman²

¹Surgery Department, Faculty of Medicine, Public Health and Nursing Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia
²Sub Division Oncology Surgery, Faculty of Medicine, Public Health and Nursing Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia

**Background:** Carcinoma Mammae (CM) is a malignancy of epithelial cells that limits the ducts or lobes of the breast. The lymphocyte neutrophil ratio (NLR) is reflecting the inflammatory status, has been reported to be a predictor indicator
**Conclusion:** NLR are at risk of metastasis 2.14 times higher than low NLR. The difference p = 0.013 (p < 0.05). OR value of 2.14 means that patients with high metastases 25 (33.3%) than 36 non-metastases (18.9%) with a significant difference.

**Keywords:** Carcinoma Mammae, Lymphocyte Neutrophil Ratio

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**ABSTRACT**

**Diagnosis of colorectal cancer patients survival based on demographic characteristics and preoperative neutrophil-lymphocyte ratio in Dr. Sardjito General Hospital**

Gunadi, Samsul Bahri Tanjung
Department of Surgery, Faculty of Medicine, Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia

**Background:** Colorectal carcinoma is the second leading cause of death in men and women in the United States, ranking the second most common cause of cancer in women. Neutrophils are known can reduce the adhesion and promotion properties of the extracellular matrix and inhibit apoptosis of tumor cells. Meanwhile, the high pre-therapy lymphocyte count is also an independent factor in the good prognosis in patients with pancreatic duct adenocarcinoma. This study aims to determine the characteristics of the survival characteristics of colorectal cancer patients at Dr. Sardjito Hospital and its relationship to patient demographics and preoperative neutrophil-lymphocyte ratio.

**Methods:** The study design was an observational analytical study using a retrospective cohort method that analyzed retrospective prognostic factors for the survival of patients with colorectal carcinoma at Dr. Sardjito Hospital, Yogyakarta since 2014. The data were taken from the medical records of patients diagnosed with colorectal carcinoma who had undergone surgery or treatment accompanied by supporting examinations. The research sample was taken using Lameshow, after that data analysis with SPSS 22.0 which describes the correlation of the independent variable and the dependent variable. The level of survival is described based on the Kaplan-Meier curve and is presented in the form of a Hazard Ratio (HR).

**Results:** This study has achieved the objectives of the study by obtaining the characteristics of the research sample that is well distributed and reflects the description of the population of colorectal cancer patients. Two independent research variables were found that had the most statistically significant effect on the survival of colorectal cancer patients, namely the variable age and lymphocyte ratio (Log rank p-value < 0.05). The survival rate of colorectal cancer patients in the ≤ 63 years age group was 5.26 times higher than that of the > 63 years group and in the neutrophil lymphocyte ratio (NLR) group ≤ 5.09, 7.75 times higher than the NLR group > 5.09.

**Conclusion:** The results of this study indicate that several demographic characteristics of the study sample are associated with the prognosis of postoperative colorectal cancer outcome.

**Keywords:** Colorectal Carcinoma, Demographics, Preoperative Neutrophil-Lymphocyte Ratio

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**Phyllodes tumor in adolescent patient: case report**

Prihantono, Bayu Satria, Muhammad Faruq
Department of Surgery, Faculty of Medicine, Universitas Hasanuddin, Dr. Wahidin Sudirohusodo Hospital, Makassar, Indonesia

**Background:** One of the rare breast tumors that occur in juvenile patient is Phyllodes tumor, with the rate of incidence among adolescence breast tumor is 0.1%.

**Case Presentation:** An Asian girl, 19-years-old, came to outpatient department with a big tumor at her right breast that enlarged swiftly during the period of 3
months. We performed physical examination and identify a 24 cm wide, tender tumor, with contour alteration and distension of vein. Additional test of Fine-needle aspiration biopsy (FNAB) suggest a benign phyllodes tumor. The patient then agreed to underwent wide excision surgery with 1 cm resection margin, then a McKissock Mastopexy procedure was performed. No complication was found after the treatment. After one year, no recurrence on clinical and ultrasound examination was found during follow up. A fibroepithelial phyllodes tumor is usually found in middle-aged female patient. The main treatment for phyllodes tumor is surgery, with adequate surgical margin to lower the possibility of local recurrence. For borderline, malignant or recurrence of local Phyllodes tumor, mastectomy becomes the favored option. Follow up after surgery is required to assess recurrence of local or metastatic tumor

**Conclusion:** Phyllodes tumor is a breast neoplasm that rarely occurred in juvenile patient. The sufficient treatment for Phyllodes tumor is wide excision with adequate margin of resection.

**Keywords:** Pylllodes, Breast, Adolescent, Benigen, Fibroadenoma

**Case report of 3 cases negative surgical margin before reconstruction in the treatment of advanced nasal basal cell carcinoma: an oncologic point of view**

Desak Ketut Nari Swari Pramegia¹, IB Made Suryawisesa²

¹Resident of General Surgery Department, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Denpasar, Indonesia
²Lecturer of General Surgery and Oncologic Surgery Department, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Denpasar, Indonesia

**Background:** 25% of basal cell carcinoma (BCC) occurs in nose. The recently accepted treatment includes wide excision with safety margin of 4 mm of clinically normal skin. 3 major points in the treatments are clearance, cosmetic and functional value. Often, due to its central location and delicacy of the surrounding tissue makes it hard to achieve standard surgical margin for lesions located in nose. The size and the depth of the lesion may complicate therapy.

**Case Presentation:** These 3 cases reporting large lesion BCC treated with multiple wide excisions before underwent reconstruction. Case 1 and 2 had 3- and 4-times excisions due to failure of gaining negative margin in the previous surgeries. Multiple surgeries were preferred although it delayed reconstruction, from oncologic point of view it is principle to accomplish perfect clearance of the tumor. Recurrences do not happen on big percentage of cases with positive margin, but may lead to even more complicated reconstruction that compromises patient health. The 2 cases gave satisfactory results with no recurrence within 3 years after surgery. Even, in case 3 where early reconstruction needed and more complex surgeries were not possible (due to old age, COVID era, and socio-economic limitations) we can still achieve maximum result by not rushing the perfect reconstruction. Case 3 showed closure of the defect using skin graft also gave proper Results.

**Conclusion:** Without sacrificing cosmetic and functional value, oncologic fundamental rule in BCC treatment which is clearance, is possible to achieve and need to always be prioritized.

**Keywords:** Basal Cell Carcinoma, Nasal BCC, Surgical Margin

**Characteristics of breast cancer patients underwent simple mastectomy at Dr. Hasan Sadikin Hospital, Bandung period of June 2019-2020**

Reza Syahrial Adiguna¹, Kiki Akhmad Rizki²

¹Resident Surgery, Universitas Padjadjaran, Hasan Sadikin Hospital, Bandung, Indonesia
²Consultant of Oncology Surgery, Department of Surgery, Universitas Padjadjaran, Hasan Sadikin Hospital, Bandung, Indonesia

**Background:** The latest Epidemiological data report that colorectal cancer is the most frequently diagnosed malignancies and the second leading cause of cancer related death worldwide. Among the malnourished of all patient groups, cancer patients are the most affected ones by malnutrition; a state in which the nutritional status is altered and the most common comorbidity in cancer patients.

**Methods:** A retrospective review was performed of all patient's colorectal cancer from January 2018 to December 2019 at the Dr. Hasan Sadikin Hospital. Only patients admitted colorectal cancer were considered. Patients with metabolic disease (diabetes melitus, hyper or hypothyroid) were excluded. Between January 2018 and December 2019, 2853 patients were diagnosed with colorectal cancer at the Dr. Hasan Sadikin Hospital.

**Results:** This study includes 2,853 patients with colorectal cancer were admitted at Hasan Sadikin Hospital during the period January 2018-December 2019. Based on the distribution of gender all patients are 1,500 males and 1,353 females. Average age was 48 years old at range 14-83 years old. From the study, rectal ampulla (55.6%) became the most side of location of colorectal cancer. From 48 patients who have colorectal cancer at caecum, 100% are normal nutrition. From 70 patients who have colorectal cancer at ascending colon, 91.4% are normal nutrition. From 30 patients who have colorectal cancer at transverse colon, 93.3% are normal nutrition. From 44 patients who have colorectal cancer at descending colon, 100% are normal nutrition. From 165 patients who have colorectal cancer at sigmoid colon, 95.2% are normal nutrition. From 658 patients who have colorectal cancer at colon, unspecified, 96.5% are normal nutrition. From 250 patients who have colorectal cancer at rectosigmoid junction, 94.8% are normal nutrition. From 1588 patients who have colorectal cancer at rectal ampulla, 95.0% are normal nutrition.

**Conclusion:** In conclusion, malnutrition has remained a troublesome of patient's colorectal cancer of malnutrition support between clinical practice and guidelines regarding nutrition support. Patients with colorectal cancer more common in male than female. Average age in colorectal cancer was 48 years old. Rectal ampulla became the most side of location of colorectal cancer.

**Keywords:** Colorectal Cancer, Protein-Energy Malnutrition
ABSTRACT

Background: In Indonesia, more than 80% of breast cancer cases are found at a later stage, where treatment is difficult to be obtained. Therefore the understanding of prevention efforts, early diagnosis, curative and palliative treatment as well as good rehabilitation are necessary, so that the patient's care can be carried out optimally.

Objective: Breast cancer is the most common cancer in women worldwide, with a percentage of cases 30.9%.

Methods: Data was taken from medical records in June 2019–2020 at Hasan Sadikin General Hospital Bandung.

Results: Characteristics of breast cancer patients who underwent simple mastectomy surgery for the period of 1 June 2019 - 1 June 2020 showed that there were 106 female patients (100%), 41 patients aged 51-60 years (39%), 67 patients underwent a hospital stay of 4-6 days (63%), 42 patients had the junior high school degree of education (39%), 83 patients had stage 3B (78%), 42 patients had the results of the Immunohistochemistry (IHC) examination of Luminal B Her2 Negative (40%).

Conclusion: Breast cancer patients were all female. Most patients are at the age of 51-60 years, according to previous epidemiological studies which state that women over 40 years are more at risk of developing breast carcinoma. For the target length of hospitalization still about 4-6 days, that should be 1-2 days. The level of education of the patients is still low.

Keywords: Breast Cancer, IHC, Simple Mastectomy

Chemotherapy normalizes CA 15 – 3 levels in advanced breast cancer

Josephine Widjaja¹, Pontoh V², Merung M², Lolombulan JH³

¹General Surgery Resident at Faculty of Medicine, Universitas Sam Ratulangi, Prof Dr dr R.D Kandou, Manado, Indonesia
²Department of Oncology Surgery, Faculty of Medicine, Universitas Sam Ratulangi, Prof Dr dr R.D Kandou, Manado, Indonesia
³Statistics Advisor

Background: Breast cancer is a solid cancer which has the number one highest incidence in Western or developed countries. In Indonesia, breast cancer is the number one cancer with the highest incidence followed by colorectal, lung and cervical cancer and is the highest incidence of cancer in women. In Indonesia, due to the unavailability of population-based registration, the incidence of breast cancer is based on pathology-based registration with a relative incidence of 11.5% (meaning 11 – 12 new cases per 100,000 population at risk). This study aims to evaluate the chemotherapy normalizes CA 15-3 levels in advanced breast.

Methods: The method used was analytic observational in a comparative form examination of CA15–3 serum levels in 46 patients with advanced breast cancer before and after chemotherapy in the Surgical Oncology Polyclinic and Surgical Oncology Inpatient Unit Prof. Dr. dr. Kandou Hospital, Manado, Indonesia.

Results: From 46 samples of serum CA 15 – 3 before chemotherapy, the mean high CA 15 – 3 level was 140.24 U/mL (above normal 30 U/mL). Before chemotherapy showed an increase in serum CA 15 – 3 levels of more than 20%. Statistical analysis to assess serum levels of CA 15 – 3 before chemotherapy with Unpaired (Independent) T test, obtained a value of t=−10.447 with a value of p <0.0001. Comparison of the mean serum levels of CA 15 – 3 before and after chemotherapy with Unpaired (Independent) T test, the value of t=8.025 was obtained with p value p <0.0001.

Conclusion: It is concluded that there are normal serum levels of CA 15 – 3 in patients with advanced breast cancer after chemotherapy and high levels before chemotherapy.

Keywords: Breast Cancer, Chemotherapy, CA 15 – 3

Correlation between clinicopathological status and subtype with distant metastasis in breast cancer patients at Dr. Sardjito General Hospital

Lutfi Setyro Wicaksono¹, Endi Taris Pasaribu², Artanto Wahyono³

¹General Surgery Resident, Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Dr. Sardjito General Hospital, Yogyakarta, Indonesia
²Trainee of Surgical Oncology Division, Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Dr. Sardjito General Hospital, Yogyakarta, Indonesia
³Surgical Oncology Division, Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Dr. Sardjito General Hospital, Yogyakarta, Indonesia

Background: Breast cancer is one of the most common cancers found in women. The clinicopathological status such as age, tumour size, axillary lymph nodes, histopathological grading and molecular subtypes have a high prognostic value because they are strongly associated with disease aggressiveness. This study aims to determine correlation between clinicopathological status and subtype with distant metastasis in breast cancer at Dr. Sardjito General Hospital.

Methods: This retrospective cohort study was conducted at Dr. Sardjito General Hospital with samples of operable breast cancer patients performing modified radical mastectomy at Dr. Sardjito General Hospital in 2010. Data are grouped based on their characteristics. Statistical testing through the Chi-Square test and calculating Relative Risk.

Results: A total of 134 samples meets inclusion criteria. From the results of the Chi-Square test between age, tumour size, axillary lymph nodes, histopathological grading with metastatic incidence were non-significant (P>0.05), but it was found that the subtypes and metastatic incidence were significant (P<0.05) with a Relative Risk of 7.4 for non-luminal types.

Conclusion: There is correlation between subtypes and metastasis in breast cancer patient, where the non-luminal subtype had a 7.4-fold risk of experiencing metastases when compared with the luminal group.

Keywords: Breast Cancer, Clinicopathological Status, Subtype, Metastasis
Correlation between subtypes and five years survival in operable breast cancer patients at Dr. Sardjito General Hospital

Lutfi Setyo Wicaksono1, Endi Taris Pasaribu2, Artanto Wahyono1
1General Surgery Resident, Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Dr. Sardjito General Hospital, Yogyakarta, Indonesia
2Trainee of Surgical Oncology Division, Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Dr. Sardjito General Hospital, Yogyakarta, Indonesia
3Surgical Oncology Division, Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Dr. Sardjito General Hospital, Yogyakarta, Indonesia

Abstract:
Breast cancer ranks second as a cause of death from cancer on women after lung cancer. Survival rates are an important index for evaluating the quality of cancer control programs. The 5-year survival rate represents the percentage of individuals who survived 5 years after the initial diagnosis of cancer. Each breast cancer subtype has a different survival rate, for example Luminal A has the best survival rate. This study aims to determine correlation between subtypes and five-year survival in operable breast cancer patients at Dr. Sardjito General Hospital populations.

Methods: This retrospective cohort study was conducted at Dr. Sardjito General Hospital, with samples of operable breast cancer patients performing modified radical mastectomy surgery during 2010.

Results: 134 data was match for inclusion criteria. The grouping is based on molecular subtypes, result was 104 has luminal and 30 has non-luminal subtypes. The luminal five-years survival rate is 93.1% while the non-luminal group is 48.9%. Kaplan-Meier survival test, the P value was 0.00 (P<0.05) where it showed a significant difference between two groups.

Conclusion: We conclude there is a correlation between subtypes and five-years survival in operable breast cancer patients at Dr. Sardjito General Hospital populations, where the luminal subtype has better survival than the non-luminal.

Keywords: Breast Cancer, Subtype, Luminal, Non-luminal, Five-Years Survival

Diffuse large B cell lymphoma of the breast

Salamullah1, Monty P. Soemitro2, Kiki A Rizki1
1Trainee of Head, Neck, and Oncology Surgery, Department of Surgery, Hasan Sadikin Hospital, Bandung, West Java, Indonesia
2Consultant of Head, Neck, and Oncology Surgery, Department of Surgery, Hasan Sadikin Hospital, Bandung, West Java, Indonesia

Background: Primary Breast lymphoma (PBL) is very rare case, which is a subtype of Non-Hodgkin Lymphoma. Diffuse Large B-cell lymphoma is the most common histopathology. There are 2 types of lymphoma in the breast, primary and secondary. This case study aims to evaluate the diffuse large B cell lymphoma of the breast.

Case Presentation: A woman 54 years old, was married, there was a lump in the right breast since 5 months ago. There were no other complains. From the physical examination, it was found a mass in the right breast with a size of 20 x 10 x 5 cm in the whole quadrant. Lymph node is not felt. In patients complete blood test, abdomen ultrasound, incisional biopsy, x-ray thorax, and immunohistochemistry were performed. With a diagnosis of Diffuse Large B-Cell Lymphoma of Breast (stage I), primary type, low risk. Therapy is chemotherapy with a RCHOP (Rituximab, Cyclophosphamid, Doxorubicin, Vincristin, and Prednisone) regimen for 6 cycles per 21 days. After chemotherapy, the results is complete responses, there is no further mass found. The patients now follow up each 3 months.

Conclusion: Primary Breast Lymphoma (PBL) is a rare case. The PBL histopathology feature almost the same with carcinoma of breast so Immunohistochemistry is necessary to make PBL diagnostic. Combined chemotherapy regimens used alone or continued with radiotherapy and depending on histopathological type, disease stage and prognostic index.

Keywords: Primary Breast Lymphoma, Non-Hodgkin Lymphoma, Diffuse Large B-Cell Lymphoma, Chemotherapy.

Margin of the sacral chordoma: a case report

Syahriandra1, Roni Eka Saputra2
1General Surgery Resident, Faculty of Medicine, Universitas Andalas, Dr. M Djamil General Hospital Padang, West Sumatera Province, Indonesia
2Orthopaedic Division, Faculty of Medicine, Universitas Andalas, Dr. M Djamil General Hospital Padang, West Sumatera Province, Indonesia

Background: Chordoma is a rare malignant tumor with predilection for the sacrum. Sacral chordoma is the most common primary malignant tumor of the sacrum. It accounts for 1–4% of all malignant bone tumors. It is predominantly seen in the Caucasian population with males being more affected than females. A favorable outcome depends on early diagnosis and surgical excision with tumor free margins.

Case Presentation: In this case report, a 50-years-old woman came for treatment at the Orthopaedic Polyclinic of DR. M. Djamil hospital with complaints of pelvic pain since 5 months ago. Pain was felt more and more pain, pain continues. In addition, patients also complain that defecation is difficult and not smooth. There was no mass of the pelvic area. The patient had an MRI examination and had surgery excision with a tumor free margin, sacrectomy, stabilization and spinal fusion. the result of the anatomic pathology is chordoma.

Conclusion: Surgery excision with a tumor free margin, sacrectomy, stabilization and spinal fusion provide a favorable outcome in this patient.

Keywords: Sacral Chordoma, Sacrectomy, Spinal Fusion

Relationship between vitamin d receptor expression with VEGF-A in women with metastatic breast cancer at Dr. Soetomo General Hospital Surabaya

Damian Dwi Rahadi1, Hantoro Ishardyanto3, Iskandar Ali2, Willy Sandhika3
1Resident of Surgery, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia
2Staff of the Department of Surgery, Oncology Division, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia
3Staff of the Department of Anatomical Pathology, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia

Conclusion: There is a correlation between the expression of vitamin D receptor and VEGF-A in women with metastatic breast cancer. This study suggests that the expression of vitamin D receptor and VEGF-A may play a role in the development and progression of metastatic breast cancer.
Background: Breast cancer is a malignancy in breast tissue. Breast cancer is the second highest cause of death from cancer in Indonesia. One of the main causes of death in breast cancer is metastatic breast cancer which the 5-year survival rate is only 23.3%. Vitamin D levels and expression of Vitamin D receptors are very important in the process of angiogenesis, especially in endothelial cells of tumor’s blood vessels. Activation of vitamin D receptors and vitamin D will inhibit the process of neo-angiogenesis thereby reducing the risk of metastasis. Decreased angiogenesis activity can be seen from VEGF-A expression.

Methods: The research's design is cross-sectional research. The study was done by immunohistochemical staining of breast cancer tissue of patients with metastatic breast cancer for the expression of vitamin D receptors and VEGF-A.

Results: Total patients of this study are 24 patients. It was obtained 19 people (79,2%) aged <50 years and 5 people (20,8%) aged> 50 years. It was also obtained 4 people (16,6%) with liver metastases, 6 people (25%) with contralateral breast metastases, 4 people (16,6%) with pulmonary metastases, and 10 people (41,8%) with bone metastases. The mean expression of vitamin D receptors was 67,1%±14,1% and the mean VEGF-A was 67,5%±6,7%. It was found that there was a significant relationship between the expression of vitamin D receptors and VEGF-A (p = 0.007). The cut-off point of VDR is 74,38% and VEGF-A is 69,1%.

Conclusion: There is a positive correlation between VDR expression and VEGF-A expression in patients with metastatic breast cancer

Keywords: Metastatic Breast Cancer, Vitamin D Receptors, VEGF-A, Breast Cancer

The effects of Cyclophosphamide, Adriamycin and 5-Fluorouracil chemotherapy on blood cells and cardiac hemodynamics in breast carcinoma patients: case study at Dr. Kariadi General Hospital Semarang

Sibin Chandra1, Djoko Handoyo2
1Resident of General Surgery Department, Faculty of Medicine, Universitas Diponegoro, Dr. Kariadi General Hospital, Semarang, Indonesia
2Lecturer of General Surgery Department, Faculty of Medicine, Universitas Diponegoro, Dr. Kariadi General Hospital, Semarang, Indonesia

Background: Treatment modalities for breast malignancy include surgery, chemotherapy, radiotherapy, immunotherapy and hormonal therapy. Giving chemotherapy in addition to killing cancer cells as well as normal cells, including blood cells and heart cells, and produces free radicals. The resulting free radicals cause many side effects and what often causes problems is a decrease in blood cells and cardiac hemodynamics. The high myelosuppression and cardiotoxicity morbidity and mortality rates associated with chemotherapy for breast cancer can be reduced by detection using blood tests and echocardiography. This study aims to prove a decrease in blood cells and cardiac hemodynamics in breast carcinoma patients who are given chemotherapy Cyclophosphamide, Adriamycin and 5-Fluorouracil.

Methods: Analytical Prospective Observational Study of outpatients with a diagnosis of breast carcinoma, without prior chemotherapy treatment, no disturbances in blood cells and cardiac hemodynamics, who were given CAF chemotherapy. Each patient was followed up before chemotherapy and after chemotherapy cycles 1, 2, and 3. The laboratory parameters that were assessed were Hb, hematocrit, erythrocyte, leucocyte, platelet and echocardiographic parameters that were assessed were LVEF, stroke volume and cardiac output.

Results: A total of 40 subjects, namely 5 subjects dropped out and 35 subjects completed chemotherapy according to the inclusion criteria. The mean age was 51.94 + 10.55. There was a decrease in Hb, hematocrit, erythrocyte, leukocytes and platelets after chemotherapy cycles 1, 2 and 3 which were statistically significant (p <0.05). There was a decrease in LVEF, stroke volume and cardiac output after chemotherapy cycles 1, 2 and 3 which were statistically significant (p <0.05), a decrease in stroke volume and cardiac output. post chemotherapy cycles 2 and 3 were statistically significant (p <0.05), but no cardiotoxicity was found in this study.

Conclusion: There is a decrease in blood cells (Hb, hematocrit, erythrocytes, leukocytes and platelets) and cardiac hemodynamics (LVEF, stroke volume and cardiac output) in breast carcinoma patients who are given chemotherapy Cyclophosphamide, Adriamycin and 5-Fluorouracil.

Keywords: Chemotherapy, Myelosuppression, Cardiotoxicity, Breast Carcinoma.

Wide excision with latissimus dorsi myocutaneous flap in squamous cell carcinoma at preauricular region: a case report

Yona Riapesi1, Daan Kambri2, Wirsma Arif Harahap3, Rony Rustam1, Oktahermoniza2, Heldrian Dwinanda Suyuthie2, Arie Oktavenra3
1Resident of General Surgery, Faculty of Medicine, Universitas Andalas, Dr. M. Djamil Hospital Padang, West Sumatera, Indonesia
2Surgical Oncology Consultant, Faculty of Medicine, Universitas Andalas, Dr. M. Djamil Hospital Padang, West Sumatera, Indonesia
3Surgical Oncology Fellowship, Faculty of Medicine, Universitas Andalas, Dr. M. Djamil Hospital Padang, West Sumatera, Indonesia

Background: Squamous cell carcinoma of the skin is a malignant proliferation origination from squamous epithelial cells and tends to infiltrate the surrounding tissue. Surgery is the chosen procedure and can be used for both small and large lesion. The Latissimus Dorsi Myocutaneous Flap (LDMF) is a procedure that can be used to cover the large defects.

Case Presentation: A man, 80 years old with a lump in front of his left ear that rapidly enlarged. The lump enlarges to the size of chicken egg within four months. Histopathological founding of squamous cell carcinoma was shown in the previous biopsy result. There were no enlargement of lymph nodes and no metastases were found on the chest X-ray. The wide excision procedure was performed to remove the tumor with ensuring the tumour-free incision margin that rapidly enlarged. The lump enlarges to the size of chicken egg within four months. Histopathological founding of squamous cell carcinoma was shown in the previous biopsy result. There were no enlargement of lymph nodes and no metastases were found on the chest X-ray. The wide excision procedure was performed to remove the tumor with ensuring the tumour-free incision margin that rapidly enlarged. The lump enlarges to the size of chicken egg within four months. Histopathological founding of squamous cell carcinoma was shown in the previous biopsy result. There were no enlargement of lymph nodes and no metastases were found on the chest X-ray. The wide excision procedure was performed to remove the tumor with ensuring the tumour-free incision margin that rapidly enlarged. The lump enlarges to the size of chicken egg within four months. Histopathological founding of squamous cell carcinoma was shown in the previous biopsy result. There were no enlargement of lymph nodes and no metastases were found on the chest X-ray. The wide excision procedure was performed to remove the tumor with ensuring the tumour-free incision margin.

Conclusion: Surgery is the treatment of choice in Squamous cell carcinoma of the skin. The LDMF is one of the chosen procedures for fairly extensive defect after tumor removal, because this flap has a long vascular pedicle so it can be used for wound coverage in a large temporal defect and gives a good aesthetic result with fewer complications.

Keywords: Squamous Cell Carcinoma, Latissimus Dorsi Myocutaneous Flap, Wide Excision
Expression of KI-67 in all subtype of breast cancer and its relationship to clinicopathological status

Dayat Prabowo, Sumadi Lukman Anwar
Department of Surgery, Faculty of Public Health Medicine and Nursing, Gadjah Mada University, RSUP Dr. Sardjito, Yogyakarta, Indonesia

Background: Breast cancer which is heterogeneous and complex, is divided into several subtypes which are defined immunohistochemically with different biological appearance. One of the hallmarks of tumor development is the aberrant proliferation and migration of tumor cells. KI-67 is a nuclear proliferation marker expressed in all phases of the cell cycle except G0. In general, breast cancer expressing high KI-67 correlates with a poor prognosis. KI-67 proliferative activity was also associated with breast cancer clinicopathology, tumor differentiation rate, invasion and metastasis. This study aims to measure the expression level of KI-67 in breast cancer tissue and investigate the relationship between KI-67 and breast cancer clinicopathology.

Methods: In this study, patients diagnosed with breast cancer were retrospectively evaluated at RSUP Dr. Sardjito in 2018 to 2019. From the medical records, data on the clinicopathology, immunohistochemistry and supporting examinations were taken to evaluate distant metastases. Data analysis was performed using SPSS version 24 with univariate and bivariate statistical analysis with Pearson Chi-Square.

Results: The results obtained p value = 0.306 (> 0.05), indicating that there was no significant relationship between KI-67 expression and tumor size; the result of p value = 0.789 (> 0.05), indicating that there was no significant relationship between KI-67 expression and lymph node involvement; the result of p value = 0.000 (> 0.05), indicating that there is a significant relationship between KI-67 expression and differentiation grading; and the result of p value = 0.035 (<0.05), indicating that there is a significant relationship between KI-67 expression and the incidence of distant metastases.

Conclusion: The results showed that the level of KI-67 expression in breast cancer tissue had a positive correlation with histological grading and the incidence of metastases. However, the expression level of KI-67 was not significantly associated with tumor size and number of lymph node metastases. These findings suggest that high expression of KI-67 plays a role in promoting the pathogenesis and development of breast cancer. In addition, KI-67 plays an important role in promoting the origin and metastasis of breast cancer.

Keywords: Breast Cancer, Immunohistochemistry, KI-67, Clinicopathological Status, Distant Metastases

Extrathyroidal extension ventrally to the thoracic wall of a papillary thyroid cancer

Muhammad Afief Perwira Setia1, Sumadi Lukman Anwar2
1General Surgery Resident, Surgical Oncology Division, Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Dr. Sardjito General Hospital, Yogyakarta, Indonesia
2Staff of Surgical Oncology Division, Surgical Oncology Division, Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Dr. Sardjito General Hospital, Yogyakarta, Indonesia

Background: Local extension is a common presentation of papillary thyroid cancer particularly to central neck lymph nodes and perithyroidal soft tissues. Invasion to the subcutaneous tissue, larynx, trachea, esophagus, and recurrent laryngeal nerve was considered as T4 in the TNM system.

Case Presentation: A 52-year-old man presented with a slowly growing painless lump of the neck for 3 years that rapidly extended to the chest wall in the past 6 months. CT scan showed inhomogeneous amorphic lesion around 5.8 cm in diameter. FNA biopsy revealed inconclusive follicular lesion. Total thyroidectomy and removal of the extended lesion were then performed. Pathologic features showed polymorphic cells in papillary arrangement with enlarged round and oval nuclei and coarse chromatin forming a ground glass appearance. Radio-ablation using I-131 was administrated 1 month after surgery.

Conclusion: Extrathyroidal extension indicates a high-risk papillary thyroid cancer that might require more intensive treatment and surveillance.

Keywords: Extrathyroidal Extension, Papillary, Thyroid Cancer

Factor associated to risk of contralateral breast cancer and the correlation with progression-free survival and time to distant metastasis

Muhammad Afief Perwira Setia1, Sumadi Lukman Anwar2
1General Surgery Resident, Surgical Oncology Division, Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Dr. Sardjito General Hospital, Yogyakarta, Indonesia
2Staff of Surgical Oncology Division, Surgical Oncology Division, Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Dr. Sardjito General Hospital, Yogyakarta, Indonesia

Background: The clinical impacts of bilateralism on prognosis and clinical decision-making remain contradictory particularly in area with low incidence and delayed diagnosis of primary breast cancer. Identification of women at risk of bilateral breast cancer are required to improve patient management and to design the surveillance.

Methods: A total of 1083 women were enrolled and analyzed for the presence of synchronous and metachronous bilateral breast cancer during the median follow up of 4.8 years.

Results: The incidence of bilateral breast cancer was 7.5% (81 of 1083). In comparison with unilateral breast cancers, bilateral cases were significantly diagnosed in younger women (P=0.037) and had a larger tumor size (P=0.012). Histological type of lobular cancer was identified as the risk factors for the development of contralateral breast cancer (OR 5.564, 95%CI 3.219-9.620) and synchronous bilateral breast cancer (OR 2.561, 95%CI 1.182-5.550). Bilateral breast cancer had significantly shorter progression-free survival (P=0.001) and shorter time to develop distant metastasis (P=0.001).

Conclusion: First primary breast tumors with lobular histological type and advanced stages are suggested to have higher risks for the development of contralateral breast cancers.

Keywords: Bilateral, Contralateral, Breast Cancer, Risks, Survival, Outcome
Correlation between Platelet Lymphocyte Ratio (PLR) and Neoadjuvant Chemotherapy (NAC) CAF response for locally advanced breast cancer patients

Aryo Wibisono¹, I Nengah Wiadnyana Steven Christian², Putu Anda Tusta Adiputra³
¹Resident of General Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia
²Sub-Division of Oncology Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia

Background: The incidence of LABC (Locally Advanced Breast Cancer) in Indonesia is estimated more than 50%, and in Bali as many as 76.3% from all breast cancer cases. Response of NAC (Neoadjuvant chemotherapy) in LABC case is not the same on each patient. Currently, there are several biomarkers that can be a predictor of NAC response on LABC. One of them is PLR (platelet lymphocyte ratio). PLR is an easy, cheap and fast marker to be counted, but not all clinicians know its role. Lack of research in the relationship of PLR to NAC CAF (Cyclophosphamide, Adriamycin, 5 Fluorouracil) response in patients with LABC are currently making researchers interested in studying it.

Methods: This research is observational analytics, using a retrospective cohort study. The number of samples was 62 (consecutive sampling), obtained from the medical records of patients who had undergone NAC CAF from 2015-2019 at Sanglah Hospital Denpasar. PLR value and initial tumor size were calculated before undergoing chemotherapy, then assessed the NAC CAF response to tumors after undergoing 3 cycles of chemotherapy. Positive response if tumor size is reduced and negative response if the tumor size is persisting or enlarges. In this study use a cutoff point of PLR 150.

Results: From 62 respondents obtained PLR value ≤ 150 had a positive response of 77.1% and 22.9% had a negative response. From these results obtained a correlation between PLR value with responses to NAC CAF in LABC patients, where low PLR values had positive responses 1.6 times (IK 95; 1.04 - 2.47) with an output value of p = 0.018.

Conclusion: There is a correlation between PLR and NAC CAF response, where a low PLR value (PLR ≤ 150) has a positive response to NAC CAF in LABC patients.

Keywords: PLR, NAC, CAF, Locally Advanced Breast Cancer

Relationship between PLR and cancer subtypes breast cancer patients in Sanglah Denpasar Hospital

Department of Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia

Background: Breast cancer is one of the most diagnosed malignancies, as well as the leading cause of cancer mortality in women worldwide. The research objective was to analyze the relationship between PLR and breast cancer subtypes in breast cancer patients in Bali.

Methods: This study used a cross sectional design to assess how PLR could predict cancer subtypes in breast cancer patients involving 52 respondents by consecutive sampling.

Results: age ≤ 51 years is the most respondents 69.7% with p-value 0.218. The location of left breast tumor was found to be more 63.2% with a p-value of 0.416. The best cut off point lies at 162.1. PLR ≤ 162.1 with the luminal subtype of breast cancer, there were 22 respondents 66.7% with an OR of 4.3 (CI: 1.29-14.50) and a p-value of 0.015. The results of logistic regression analysis showed that PLR is the dominant factor causing the luminal subtype of breast cancer.

Conclusion: Age and location of tumor were not associated with breast cancer subtypes. PLR was significantly positive and the strength of the association was moderate with the non-luminal subtype of breast cancer. PLR values tended to be higher in non-luminal cancer subtypes compared to luminal cancer subtypes.

Keywords: Platelets, Platelet Lymphocyte Ratio, Cancer Subtypes, Breast Cancer

Relationship of obesity recurrence events in triple negative breast cancer patients at Dr. Soetomo General Hospital Surabaya

Daniel Doli Haholongan¹, Iskandar Ali², Eddy Herman Tanggo²
¹Resident of Surgery, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia
²Staff of the Department of Surgery, Oncology Division, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia

Background: Breast cancer is one of the most major cause of death in women. One of the forms of breast cancer that has poor prognosis is triple negative breast cancer (TNBC). TNBC occurs in 10-20% of breast cancer, with high number of relapse/recurrence and metastasis. In some earlier research, it was found that the number of TNBC was higher in patients with obesity. Therefore, obesity is associated with poor prognosis in patients with breast cancer. This research wants to study the relationship of obesity with recurrence in TNBC patients.

Methods: This research is a retrospective cohort research in patients with triple negative breast cancer. Research was carried out by recording patients with TNBC and measurement of the degree of obesity by calculating the body mass index (BMI). Patients was followed-up for 6 months after surgery to monitor if there is any recurrence.

Results: In this research, it was obtained a total of patients of 56, 33 people (58.9%) with normal BMI or non-obesity and 23 people (41.1%) with obesity. From the terms of recurrence, it was obtained 26 peoples (46.4%) was experience recurrence and 30 peoples (53.6%) without experienced a recurrence. Statistical tests proved that there is significant relationship between obesity with the incidence of recurrence (p = 0.019) with an odds ratio (OR) of 3.75.

Conclusion: On increasing BMI there was an increase in recurrence cases in patients with Triple Negative Breast Cancer.

Keywords: Triple Negative Breast Cancer, Recurrence, Obesity, Cancer Breast
Association of Epstein Barr Virus Infection to prognosis factors of invasive breast cancer in Kariadi General Hospital Population

Wasisto Dwi Yudisaputro1, Djoko Handoyo1, Yan Wisnu Prajoko1, Dik Puspasari1
1Surgical Oncology Trainee, Faculty of Medicine, Universitas Diponegoro, Dr. Kariadi General Hospital, Semarang, Indonesia
2Department of Oncology Surgery, Faculty of Medicine, Universitas Diponegoro, Dr. Kariadi General Hospital, Semarang, Indonesia
3Department of Oncology Surgery, Faculty of Medicine, Universitas Diponegoro, Dr. Kariadi General Hospital, Semarang, Indonesia
4Department of Pathology Anatomy, Faculty of Medicine, Universitas Diponegoro, Dr. Kariadi General Hospital, Semarang, Indonesia

Background: Breast cancer is the most common malignant disease in female. In addition to internal factors, external factors such as viral infections are thought to have a role in the carcinogenesis process of breast cancer. In the case of nasopharyngeal cancer, Epstein-Barr Virus (EBV) has been shown to be able to activate several signaling pathways so that cancer cells become more aggressive and have a worse prognosis. This study aims to determine the relationship of the detection status of EBV DNA with the prognosis factor of breast cancer.

Methods: The research design used in this study was analytic observational with a cross-sectional approach, with 71 paraffin block samples from the Anatomical Pathology Laboratory of Kariadi General Hospital who obtained from mastectomy or Breast Conserving Surgery. Samples was examined using PCR to detect EBV DNA in tumor cells.

Results: The age of breast cancer cases ranged from 23 to 78 years with median age of 52 years. From 71 samples, there were 28 positive samples (39.4%) of EBV DNA and 43 samples (60.6%) were negative. Significant results were obtained (p < 0.05) in the relationship between EBV infection and tumor size (p = 0.002), axillary lymph node metastasis (p = 0.001), and lymphovascular invasion (p = 0.001).

Conclusion: Our research could find a significant statistical association in the status of axillary lymph nodes, lymphovascular invasion status and tumor size in breast cancer samples infected by EBV and those not infected by EBV.

Keywords: Breast Cancer, Prognosis Factors of Breast Cancer, EBV Infection, Molecular Detection of EBV.

Impaired glucose tolerance, diabetes mellitus, and obesity to the risk of distant metastasis in breast cancer patients

Lutfi Setyo Wicaksono1, Sumadi Lukman Anwar2, Herjuna Hardiyanto1
1General Surgery Resident, Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, D. Sardjito General Hospital, Yogyakarta, Indonesia
2Surgical Oncology Division, Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, D. Sardjito General Hospital, Yogyakarta, Indonesia

Background: Breast cancer is one of the most common cancers found in women. Metabolic syndrome itself is a collection of obesity, insulin resistance, dyslipidemia, and hypertension. Hyperglycemia, has been linked to increased proliferation, inhibits apoptosis, and increased metastasis of cancer cells. Several studies have also shown that obese women tend to develop more aggressive breast cancer of a significantly larger size compared to women of normal weight. Metastasis is a very complex process and the leading cause of cancer-related death. It is now beginning to understand why patients with the metabolic syndrome diagnosed with cancer have a worse prognosis and are more likely to develop metastasis. This study aims to determine the effect of impaired glucose tolerance, diabetes mellitus, and obesity on the incidence of distant metastases in breast cancer patients.

Methods: This retrospective cohort study with the subject patients diagnosed breast cancer in January 2018 - December 2019 in Dr. Sardjito General Hospital. The data were then grouped for their characteristics and analyzed using the Chi-Square test. P value <0.05 was considered significant.

Results: A total of 304 breast cancer patients met the inclusion criteria. From the results of the Chi-Square test on breast cancer patients with impaired glucose tolerance, diabetes, and obesity each has a value of P=0.857, P=0.626, and P=0.155, respectively, so that these results are not significant when compared to patients without these comorbid for distant metastasis.

Conclusion: There is no correlation between impaired glucose tolerance, diabetes mellitus, and obesity to the incidence of distant metastasis in breast cancer patients.

Keywords: Breast Cancer, Impaired Glucose Tolerance, Diabetes Mellitus, Obesity, Distant Metastases.

Metastatic lymph node of papillary thyroid carcinoma presenting as neck lymph node enlargement in children: a pitfall of diagnostic errors

Hendry Irawan1, I Ketut Widiana2
1Trainee of Surgical Oncology Division, Department of Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia.
2Surgical Oncology Division, Department of Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia.

Background: Neck lymph node enlargement was common in children because the lymph nodes was an immune system. However, neck lymph node enlargement can be a sign of metastases from another organ. Thyroid carcinoma is rare in children. Papillary thyroid carcinoma was the most pathological finding in children.

Case Presentation: A girl, 8 years old came to the West Nusa Tenggara general hospital with a lump in the right neck below the ear lobe in the last 1.5 years ago. The clinical finding was multiple lymph node enlargements in right neck and small enlargement of right thyroid. She was done the open biopsy on the right neck lymph node enlargement without fine needle aspiration biopsy, the result was a papillary thyroid carcinoma. She was referred to Sanglah general hospital. She underwent total thyroidectomy and right radical neck dissection. The pathological finding of the surgery was papillary thyroid carcinoma with 4 metastatic lymph nodes from 9 lymph nodes in levels 2, 3, and 4. After the surgery, she underwent radioactive iodine and consumed levothyroxine for hormonal suppression. After thyroid ablation, she was not any malignancy in the surgical field and had functional thyroid on the left side at thyroid cartilage.

Conclusion: Neck lymph node enlargement must be considered as a metastatic lesion. We need to confirm with fine needle aspiration biopsy. It can reduce...
morbidity to the patient compared with open biopsy. Thyroid carcinoma is rare in children, but the most common pathological finding is papillary thyroid carcinoma and it can metastasize to regional lymph nodes.

**Keywords:** Metastatic Lymph Node, Neck Lymph Node Enlargement, Papillary Thyroid Carcinoma, Children

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**Effect of physical activity Walking Exercise Program (WEP) on Cancer Related Fatigue (CRF) on breast cancer patients at Sanglah General Hospital, Denpasar, Indonesia**

**Gede Sukma Pranata**, I Gede Budhi Setiawan, I Gde Raka Widiana

1. General Surgery Resident, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia.
2. Oncology surgery division, Surgery Department, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia.
3. Nephrology division, Internal Medicine Department, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia.

**Background:** Cancer Related Fatigue (CRF) is one of the most common symptoms experienced by breast cancer patients. Some studies have shown a positive impact of physical activity in reducing CRF. One of the physical activities recommended in the form of Walking Exercise Program (WEP) because it is safe and easy to do. The purpose of this study is to know the influence between physical activity in the form of WEP on CRF in breast cancer patients at RSUP Sanglah Denpasar.

**Methods:** This study is an experimental randomized controlled trial group pretest-posttest design research. Randomization is carried out on all breast cancer patients treated at Sanglah Denpasar Hospital in 2018 who are 18-60 years old, to be distinguished in control groups and treatment groups (who undergo WEP). Data takers and data processing are camouflaged about randomization and treatment conditions. WEP is carried out for three weeks which is done 3 times a week for 30 minutes. In both groups, brief inventory fatigue (BFI) scores were assessed before and after treatment. The data was then collected and carried out statistical analysis with SPSS 25.0.

**Results:** The study initially consisted of 41 participants in the intervention group and 41 in the control group. Two participants from the control group withdrew from the study. In the analysis of BFI scores after exercise, it was found that BFI scores in the intervention group decreased significantly compared to the control group (2.8 ± 1.2 vs. 0.2 ± 0.7; p<0.001). An ANCOVA test to determine the effect of WEP physical activity on CRF reduction by controlling cofounding variables (age, disease stage, nutritional status, Karnofsky's score) found that WEP physical activity can have an effect 2.5 times greater than control (p=0.001).

**Conclusion:** WEP physical activity decreased CRF levels in breast cancer patients 2.5 greater when compared to controls so recommended as one of CRF treatment in patients with breast cancer.

**Keywords:** Walking Exercise Program, Fatigue, Cancer Related Fatigue.

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**The difference of cost-effectiveness of less or more than 3 days drain removal in modified radical mastectomy**

**Dewa Nyoman Putra Adiwinita**

1. General Surgery Resident, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia.

**Background:** The Modified radical mastectomy (MRM) is a therapeutic choice for operable breast cancer. The most frequent post-surgery complication is seroma formation, and this can be circumvented by the use of drainage. There is still a debate over the use of drainage time on the effectiveness and cost efficiency used. The purpose of this study is a more in-depth study of the cost-effectiveness of removing drainage in less than three days with more than three days, in patients post-MRM.

**Methods:** This research is a cost-effectiveness analysis using a decision tree, with a cross-sectional analytic research design. Data collection was performed retrospectively by comparing direct medical cost to evaluate the difference in cost-effectiveness of drain removal for less than three days and for more than three days for modified radical mastectomy (MRM).

**Results:** 36 samples were collected that met the exclusion and inclusion criteria, consisting of 19 samples in the group with drainage removal ≤ 3 days, and 17 samples in the group with drainage removal > 3 days. Analysis of the cost of removing the drain less than three days showed the average direct medical cost of the patient was Rp.700,578.00. Whereas patients with drain removal for more than three days showed a direct medical cost of Rp. 981,000.00. The average difference in average cost-effectiveness ratio between the two groups is Rp. 2,599.00.

**Conclusion:** In this study, patients with drainage removal ≤ 3 days had better cost-effectiveness compared to drain removal > 3 days.

**Keywords:** Cost Effective, Drain, Post-Operation, Modified Radical Mastectomy

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**Case report: insular variant of papillary thyroid carcinoma**

**Sylvia Noviani Saing**, Mulawan Umar

1. General Surgery Resident, Faculty of Medicine, Universitas Sriwijaya, Dr. Mohammad Hoesin Central General Hospital, Palembang, Indonesia
2. Division of Oncology Surgery, Department of Surgery, Faculty of Medicine, Universitas Sriwijaya, Dr. Mohammad Hoesin Central General Hospital, Palembang, Indonesia

**Background:** Papillary thyroid carcinoma (PTC) which accounts for 80% of thyroid malignancies in iodine-sufficient areas, mostly metastasizes to lymph node and uncommon to have distant metastases at initial presentation. It has variants, count for about 1%, such as solid/insular. Insular variant of PTC has similar rate of local recurrence but higher frequency of distant metastases and worse prognosis compared with classical papillary cancer.

**Case Presentation:** A 58-years-old woman with previous pathological anatomy (PA) result was metastasis PTC of frontal region. She had bone defect on frontal region, with no palpable mass on neck and sub mandible; dysphagia or changing voice, with normal thyroid function. In thyroid ultrasound found cystic lesion (size 11 mm) with macrocalcifications in right thyroid. She had total thyroidectomy with PA result was insular variant of PTC. She's diagnosed...
with insular variant of PTC T1NOM1 (calvária metastasis). She’s given substitute dosage of synthetic thyroxine, 2.1 mcg/kg/day.

**Conclusion:** Insular variant is rare variant of well-differentiated PTC, differ with poorly differentiated thyroid carcinoma. In this patient, we should do radioactive iodine (RAI) whole body scan after total thyroidectomy. If there’s uptake, she should be given suppressive dosage of synthetic thyroxine then continue to internal radiation for eradication micro-metastasis. If there’s no RAI, we could consider to do external radiation like in poorly differentiated thyroid carcinoma.

**Keywords:** Insular Variant, PTC, Thyroid

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**Wilm’s tumor: five years evaluation**

Adi Wijayanto, Sulmiati
Department of Surgery, Faculty of Medicine, Universitas Hasanuddin, Makassar, Indonesia

**Background:** Wilms tumour accounts for nearly 6% of all pediatric cancers and more than 95% of all kidney tumours in children. Fortunately, survival for patients with Wilms tumour is generally very good if they control, diagnostic and therapy earlier. This study aims to evaluate Wilms tumour cases at Dr. Wahidin Sudirohusodo Hospital, Makassar.

**Methods:** Retrospective descriptive method based on the number of visits per year, age, sex, tumour location, therapeutic method, and the survival rate.

**Results:** We got the highest number of Wilms tumour patients at Dr. Wahidin Sudirohusodo Hospital in Makassar in 2014 was the highest in 16 cases (31.37%), the highest frequency in the 0-2 years age group was 27 cases (52.94%). Most male patients suffer from Wilms tumour disease, which is 30 cases (58.82%) compared to girls. The highest number of Wilms tumour location distribution is in the left kidney as many as 27 cases (52.94%) than di other side. From the distribution data it is also seen that many Wilms tumour patients get chemotherapy before surgery 27 cases (52.94%) and Wilms tumour patients which cured by 32 cases (62.75%).

**Conclusion:** Based on five years evaluation, the Wilms tumour patients at Dr. Wahidin Sudirohusodo Hospital in Makassar in 2014 was the highest cases where male as the predominant.

**Keywords:** Wilms Tumour, COG, SIOP

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**Correlation between breast cancer risk factors and Ki-67 in women of childbearing age at Dr. Kariadi General Hospital Semarang**

Natasha Aurellia, Antonio Paulus Aditya Nugroho, Selamat Budijitno

**Background:** According to GLOBOCAN 2018, breast cancer was the most common cancer and the leading cause of cancer death in women. In Indonesia, breast cancer incidence was 58,256 new cases per year, with a death rate of 22,692 cases. One of the prognostic and predictive factors for breast cancer was Ki-67. Ki-67 was expressed in all phases of the cell cycle except G0 as well as peaks in phase M. Hence it can represent the cancer proliferation index. This study aimed to prove the correlation between breast cancer risk factors and Ki 67 in women of childbearing age at Dr. Kariadi General Hospital Semarang.

**Methods:** The data was an analytic observational study with retrospective data collection through medical records regarding four variables: menarche, nulliparous, non-breastfeeding, and contraception history.

**Results:** There were 43 respondents and predominantly women aged 35-39 years (20 patients), followed by an age range of 45-49 years (11 patients). Women whose menarche was <12 years of age had positive expression of Ki67 as prognostic breast cancer and a significant risk of developing breast cancer (p=0.020). Women with menarche conditions had a 3.492-fold risk of developing breast cancer. Respondents also predominantly used hormonal contraception associated with tumour incidence and breast malignancy (p=0.040).

**Conclusion:** Women of childbearing age with breast cancer having risk factors for <12 years old menarche and hormonal contraceptives significantly affect the Ki-67 proliferation index.

**Keywords:** Breast Cancer, Childbearing, Ki-67

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**Tumour dormancy and breast cancer: a case report of 25 years late recurrence**

Winardi Budiwinata, Monty P. Soemito

1Trainee of Surgical Oncology Fellowship, Hasan Sadikin General Hospital, Bandung, Indonesia
2Program Director of Surgical Oncology Fellowship, Hasan Sadikin General Hospital, Bandung, Indonesia

**Background:** The concept of dormancy is derived from clinical findings that cancer recures several years or even decades after surgical resection of the primary tumour. Recurrence breast cancer exceeding 25 years is extremely rare.

**Case Presentation:** A 84-year-old female patient presented recurrence breast cancer with no enlargement of regional lymph node, neither distant metastasis. The patient had suffered from breast cancer and been given a left-sided mastectomy 25 years ago, and no history of adjuvant therapy. Delayed recurrence in this case report is well explained by the tumour dormancy theory, consists of tumour mass and cellular dormancy. Tumour mass dormancy proliferation is balanced by cell death due to angiogenic switch, immunosurveillance, interaction with extracellular matrix and stromal cells. Whereas cellular dormancy is defined as arrest in the cell cycle, mediated by different signalling pathways including PI3K-AKT low signalling and high p38 over ERK activity. In this patient, Estrogen Receptor (ER) is positive which a clinical model of late recurrence. ER (+) cancer cells may stay dormant for a protracted period of time. Most ER (+) cancer cell exhibit high Src activity, a survival mediator that potentiates PI3K/AKT activation. This ER (+) status explains the PI3K/AKT inactivation due to the interaction between ER and Src.

**Conclusion:** The tumour dormancy is the main theory to explain for late recurrence in this case.

**Keywords:** Breast Cancer, Late Recurrence, Tumor Dormancy.
ABSTRACT

Tumour aggressiveness: a case report of recurrent ameloblastoma in mandible

Agung Fuad Fathurochman, Marjono Dwi Wibowo

1Resident of Surgery, Faculty of Medicine, Universitas Airlangga, Soetomo General Hospital Surabaya, Indonesia
2Head and Neck Division, Surgery Department, Faculty of Medicine, Universitas Airlangga, Soetomo General Hospital Surabaya, Indonesia

Background: Ameloblastomas are rare odontogenic neoplasm of mandible and maxilla, and have high recurrence rates if improperly treated. Due to their aggressive nature and high recurrence rate, treatment remains a matter of debate. Complete excision of lesion with least morbidity would be the therapeutic challenge.

Case Presentation: A 67-years-old woman complained of swelling on her left jaw since 4 years ago, the swelling was initially small but it has grown to the size of a tennis ball. She had history of similar swelling on the same site 12 years back for which she was operated (enucleation). On physical examination, there is a mass in the left mandibular bone above the surgical wound, hard, painless and motionless, with a size of 18 cm x 11 cm x 11 cm. A panoramic radiograph showed multiple cystic lesions in the left mandible. In this case, segmental mandibular resection was performed followed by reconstruction using a K-wire.

Conclusion: Ameloblastoma has high recurrence rate if they are not treated properly. At least 1 cm of healthy bone should be removed during surgical procedure beyond radiographically visible margins. In our patient, though radical surgery eliminated a large possibility of recurrence.

Keywords: Ameloblastoma, Aggressive, Recurrence

Thrombocyte-lymphocyte ratio and neutrophil-lymphocyte ratio in different subtypes of breast cancer in Dr. Sardjito General Hospital

Dayat Prabowo, Sumadi Lukman Anwar

Department of Surgery, Faculty of Public Health Medicine and Nursing, Universitas Gadjah Mada, Dr. Sardjito General Hospital, Yogyakarta, Indonesia

Background: Breast cancer has been classified into several intrinsic subtypes with clinically different gene expression patterns, and each intrinsic subtype is represented by an immunohistochemically defined subtype. The interaction of the immune system with tumor cells in breast cancer appears to be related to the patient’s prognosis. The platelet/lymphocyte ratio (PLR) and the neutrophil/lymphocyte ratio (NLR) are easily measured, reproducible, and inexpensive markers of subclinical inflammation and have prognostic roles in many types of cancer, including breast cancer. The aim of this study was to investigate the PLR and NLR values in various breast cancer subtypes.

Methods: In this study, patients diagnosed with breast cancer were retrospectively evaluated at Dr. Sardjito General Hospital from 2018 to 2019. From the medical records, complete blood count data before action/surgery and immunohistochemetical examination data were taken. Data analysis was performed using SPSS for Windows, version 24 with univariate and bivariate statistical analysis with Pearson Chi-Square.

Results: The results of statistical analysis showed that the value of p=0.555; 0.562; 0.313 (>0.05) in all tests (Pearson Chi-Square, Likelihood Ratio, and Linear-by-Linear Association) so that there was no significant relationship between the PLR ratio and the subtype of breast cancer and p=0.197; 0.178; 0.116 (> 0.05) on all tests (Pearson Chi-Square, Likelihood Ratio, and Linear-by-Linear Association) so there was no significant relationship between the NLR ratio and the subtype of breast cancer.

Conclusion: The results of statistical analysis show that the PLR ratio and NLR ratio are not factors that affect the type of breast cancer subtype.

Keywords: Breast Cancer, Immunohistochemistry, Cancer Subtype, PLR, NLR

The relationship between platelet-lymphocyte ratio against prognosis using Nottingham prognostic index in breast cancer patients at Dr. Sardjito Hospital

Gizza Dandy Pradana, Herjuna Hardiyanto, Sumadi Lukman Anwar

Department of Surgery, Faculty of Public Health, Medicine, and Nursing, Universitas Gadjah Mada, Dr. Sardjito Hospital Yogyakarta, Indonesia

Background: Breast cancer is a type of tumors that are most often found in women and the incidence to increase in the world (2.1 million new cases breast cancer in 2018). Inflammation has an important role in the onset of cancer, growth and development of cancer. Platelets have a role to promote tumor cells for angiogenesis, metastasis, and protect tumor cells from anti-tumor immune responses. The relationship between platelet lymphocyte ratio and prognosis of breast cancer is controversial and unconfirmed. This study aims to determine the relationship between the platelet-lymphocyte ratio against prognosis using the Nottingham Prognostic Index in breast cancer patients at Dr. Sardjito General Hospital.

Methods: The research subjects were breast cancer patients who were treated at Dr. Sardjito General Hospital in 2018-2019 with total sample in this study was 304 samples seen retrospectively using patient medical records.

Results: Chi Square PLR and NPI statistical tests showed p = 0.027 (p <0.05), OR 1,796 with 95% CI 1,064 – 3,033. Platelets lymphocyte ratio against Nottingham Prognostic Index score has a significant relationship.

Conclusion: There is a relationship between the platelet-lymphocyte ratio against prognosis using the Nottingham Prognostic Index in breast cancer patients at Dr. Sardjito General Hospital.

Keywords: Breast Cancer, Platelet Lymphocyte Ratio, Nottingham Prognostic Index, Prognosis

The relationship between platelet-lymphocyte ratio against T-classification in breast cancer patients at Dr. Sardjito General Hospital

Gizza Dandy Pradana, Sumadi Lukman Anwar

1Department of Surgery, Faculty of Public Health Medicine and Nursing, Universitas Gadjah Mada, Dr. Sardjito General Hospital Yogyakarta
2Department of Oncology Surgery, Department of Surgery, Faculty of Public Health Medicine and Nursing, Universitas Gadjah Mada, Dr. Sardjito General Hospital Yogyakarta

Background: Breast cancer is a type of tumours that are most often found in women...
The relationship between platelet-lymphocyte ratio against tumor size in breast cancer patients at Dr. Sardjito General Hospital

Gizza Dandy Pradana 1, Sumadi Lukman Anwar 2

1 Department of Surgery, Faculty of Public Health Medicine and Nursing, Universitas Gadjah Mada, Dr. Sardjito General Hospital, Yogyakarta, Indonesia
2 Department of Oncology Surgery, Department of Surgery, Faculty of Public Health Medicine and Nursing, Universitas Gadjah Mada, Dr. Sardjito General Hospital, Yogyakarta, Indonesia

Background: Breast cancer is a type of tumour that is mostly found in women and the incidence is increasing in the world. In 2018 there were 2.1 million new cases of women diagnosed with breast cancer worldwide. Inflammation has an important role in the onset of cancer, growth and development of cancer. Platelets have a role in promoting tumour cells for angiogenesis, metastasis, and protect tumour cells from anti-tumour immune responses. This study aims to determine the relationship between platelet-lymphocyte ratio against T classification in breast cancer patients at Dr. Sardjito General Hospital.

Methods: The research subjects were breast cancer patients who were treated at Dr. Sardjito General Hospital in 2018-2019 with total sample in this study was 304 samples seen retrospectively using patient medical records.

Results: Chi Square test PLR and T statistical tests showed p = 0.000 (p <0.05), OR 2,956 with 95% CI 1,823 – 4,793. Platelets lymphocyte ratio against T classification has a significant relationship.

Conclusion: There is a relationship between the platelet-lymphocyte ratio against T classification in breast cancer patients at Dr. Sardjito General Hospital.

Keywords: Breast Cancer, Platelet Lymphocyte Ratio, T-Classification, Stadium

The influence of progressive muscle relaxation on the improvement of body composition, depression status, and quality of life of breast cancer patients during chemotherapy in Dr. Mohammad Hoesin Hospital, Palembang

Ronaldoe B, Umar M, Irfanudin

Department of Surgery, Faculty of Medicine, Universitas Sriwijaya, Palembang, Indonesia

Background: The breast cancer progression and chemotherapy side effects not only cause problems in mental status, but also the patient’s physical status. This is related to a deteriorating quality of life and a worse prognosis. Physical exercise can improve physical status, mental status, and quality of life.

Methods: Experimental pre- and post-intervention research with a control group was conducted on breast cancer patients to determine the effect of progressive muscle relaxation on the improvement of body composition, depression status, and quality of life for breast cancer patients during chemotherapy at RSMM on February 2019 - February 2020.

Results: Progressive muscle relaxation can improve body composition (p = 0.000), reduce the degree of depression (p = 0.000), improve global health status (p = 0.013), physical function (p = 0.002), emotional function (p = 0.009), social function (p = 0.015), body image (0.000), sexual function (p = 0.05), future perspective (p = 0.006), and decreased fatigue (p = 0.00), nausea/vomiting (p = 0.002), pain (0.000), insomnia (0.002), loss of appetite (p = 0.000), breast symptoms (p = 0.000), arm symptoms (p = 0.000), hair loss (p = 0.000), and therapy side effects (p = 0.000).

Conclusion: The progressive muscle relaxation has a significant influence on the improvement of body composition, depression status, and quality of life of breast cancer patients during chemotherapy.

Keywords: Progressive Muscle Relaxation, Depression, Body Composition, Quality Of Life

The correlation between gender and the histopathology appearance of liposarcoma in Dr. Sardjito General Hospital 2018-2019

Samsul Bahri Tanjung W 1, Herjuna 2

1 Surgery Department, Faculty of Medicine, Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia
2 Sub Division Oncology Surgery, Faculty of Medicine, Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia

Background: In Indonesia, Liposarcoma sufferers with annual incidence rate of 2.5 cases per million inhabitants. Liposarcoma is the most common soft tissue sarcoma, accounting for about 17% of all soft tissue sarcomas. The current pattern of causes of death occurs a transition originally caused by infectious diseases to non-communicable diseases that include diseases caused by malignancy. This study aims to analyze the correlation between gender and histopathologic appearance of liposarcoma in Dr. Sardjito General Hospital.

Methods: The research is a quantitative research with cross sectional design. The study was conducted on January 2018 to December 2019 at the Dr. Sardjito General Hospital. The samples are all liposarcoma patients (total sampling)
ABSTRACT

Liposarcoma at Dr. Sardjito General Hospital Yogyakarta showed that there is correlation between age with histopathology appearance liposarcoma myxoid group 7 cases (20.59%), and group dedifferentiated liposarcoma in 2 cases (5.88%). Based on histopathology of liposarcoma, histopathology group of liposarcoma was the age group 66-80 years and age group > 80 years each 2 cases (5.88%). Based on histopathology appearance Liposarcoma at Dr. Sardjito General Hospital Yogyakarta (p = 0.197).

Conclusion: The recent findings show that there is no correlation between sex with histopathology appearance Liposarcoma at Dr. Sardjito General Hospital Yogyakarta

Keywords: Gender, Histopathology, Liposarcoma

The correlation between age and the histopathology appearance of liposarcoma in Dr. Sardjito General Hospital 2018-2019

Samsul Bahri Tanjung W, Herjuna

1Surgery Department, Faculty of Medicine, Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia
2Sub Division Oncology Surgery, Faculty of Medicine, Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia

Background: In Indonesia, Liposarcoma sufferers with annual incidence rate of 2.5 cases per million inhabitants. Liposarcoma is the most common soft tissue sarcoma, accounting for about 17% of all soft tissue sarcomas. The current pattern of causes of death occurs a transition originally caused by infectious diseases to non-communicable diseases that include diseases caused by malignancy. This study aims to analyze the correlation between age and histopathologic appearance of liposarcoma in Dr. Sardjito General Hospital

Methods: The research is a quantitative research with cross sectional design. The study was conducted on January 2018 to December 2019 at the Dr. Sardjito General Hospital. The samples are all liposarcoma patients (total sampling) were treated in hospital Dr. Sardjito in January 2018 - December 2019. The data analysis with spearman correlation.

Results: The results showed that patients with liposarcoma Most age group was age group 51-65 years old as many as 15 cases (44.12%), followed by age group 36-50 years as many as 11 cases (32.35%), group age < 20 years old as many as 3 cases (8.82%), and age group 66-80 years and age group > 80 years each 2 cases (5.88%). Based on histopathology of liposarcoma, histopathology group of liposarcoma was the group of year of well differentiated liposarcoma as many as 13 cases (38.24%), followed by pleomorphic liposarcoma group as many as 12 cases (35.29%), liposarcoma myxoid group 7 cases (20.59%) and group dedifferentiated liposarcoma in 2 cases (5.88%). After analysis with spearman correlation showed that there is correlation between age with histopathology appearance Liposarcoma at Dr. Sardjito General Hospital Yogyakarta (p = 0.05).

Conclusion: There is correlation between age with histopathology appearance Liposarcoma at Dr. Sardjito General Hospital Yogyakarta

Keywords: Age, Histopathology, Liposarcoma

Schwannoma gluteus

Romi Ranuta

Surgery Department of Medical Faculty, Universitas Andalas, Dr. M. Djamil General Hospital, Padang, Indonesia

Background: Schwannoma is a slow growing mesenchymal neoplasm arising from Schwann cells with low malignancy potential. This case report discusses Schwannoma in the gluteal region.

Case Presentation: Male 50 years old came to the Clinic complaining of Surgical Oncology with a lump in the butt area feels gradually enlarged from 15 years ago. The patient was conscious and had good vital signs, did not complain of pain in the lump. radiological examination of patients is difficult due to the large size of tumours in patients. The patient was treated for tumour removal surgery and was treated in the intensive care unit for 3 days. After the wound care in the inpatient unit until day 7 of treatment, the patient can be discharged in stable condition.

Conclusion: The pre-operative diagnosis is difficult to determine in this case due to the large size of the tumour for radiographic examination, the final diagnosis is based on histopathological examination. The present study aims to provide a possible differential diagnosis for masses located in the gluteal region.

Keywords: Schwannoma, Gluteus Benign, Case Study

Sacral chordoma: a case report

Ragil Diky Laksmana, Roni Eka Sahputra

1General Surgery Resident, Faculty of Medicine, Universitas Andalas, Dr. M. Djamil General Hospital, Padang, West Sumatera, Indonesia
2Ortopaedic Division, Faculty of Medicine, Universitas Andalas, Dr. M. Djamil General Hospital, Padang, West Sumatera, Indonesia

Background: Chordoma is a relatively rare tumour that accounts for <5% of all primary bone tumours, with an annual incidence of <0.1 per 100,000 people. Although chordoma is aligned with the axis of the spine and most commonly develops in the sacrum. To the best of our knowledge, giant sacrococcygeal chordoma is extremely rare. We present a case of giant sacrococcygeal chordoma managed in our hospital.

Case Presentation: A 60-year-old male presented to our clinic with a chief complaint of a gradually increased sacrococcygeal mass during the last 4 months. The mass was clearly visible, the skin was normal, no ulceration. There is a tingling sensation for lower extremity but normal motoric strength. The defecation and micturition were normal. After routine preoperative evaluation, the patient was placed under general anaesthesia in the prone position. A midline incision was made from the L4 level to the coccyx level (inferior border of the mass). The skin flap was made to the lateral side. The sacral tumour was subsequently exposed and excised along with sacrum from S2 to the tip of coccyx. There was spillage while the tumour was excised but no damage to surrounding organ (rectum, bladder).

Conclusion: The resulting cavity and soft-tissue defects are extensive, which can lead to subsequent complications, such as sacrococcygeal skin necrosis, infection, and delayed healing or non-healing. Therefore, after resection of the sacral tumour, reconstruction is beneficial to maintain the stability of the lumbar spine and pelvis, relieve pain, support weight, and protect the pelvic internal organs.

Keywords: Chordoma, Giant Sacrococcygeal, Bone Tumour
Relationship of thrombocyte-lymphocyte ratio to neoadjuvant chemotherapy of CAF response in locally advanced breast cancer patients

Ali Sibra Mulluzi, Hantoro Ishardyanto, Iskandar Ali, Hartono Kahar
1 Resident of Surgery, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia
2 Staff of the Oncology Division, Department of Surgery, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia
3 Staff of the Oncology Division, Department of Surgery, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia
4 Staff of the Department of Clinical Pathology, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia

Background: Breast cancer is major cause of death due to cancer in women, and is the most frequent cancer in women. Mostly the patients were diagnosed at locally advanced disease especially in developing countries. One of the modalities that has been used is administration of neoadjuvant chemotherapy. One of the most commonly used regimens is CAF (Cyclophosphamide, Adriamycin, and 5-Fluorouracil). The response to chemotherapy is very important in cancer management. One of the predictive and prognostic factors in assessing the response to therapy is the platelet/lymphocyte ratio. This study aims to determine the relationship between the value of the platelet / lymphocyte ratio with the therapeutic response of local advanced breast cancer patients receiving CAF neoadjuvant chemotherapy.

Method: This study is an associative study using a cohort analytic observational study design (longitudinal prospective), associating the ratio of platelets to lymphocytes in the blood with the clinical response of CAF neoadjuvant chemotherapy in patients with locally advanced breast cancer. Research was carried out for six months started in January 2020 to July 2020. Patients who meet the criteria for inclusion and exclusion done taking blood to check the levels of platelets compared to lymphocytes, after the patient undergoing chemotherapy for 3 cycles then the patients were evaluated for the clinical size of tumour.

Results: The subjects of the study consisted of 35 women (100%), with the age of majority is the age of 35-50 years old which consist of 19 patients (54.3%) with mean age was 47.94 ± 10.5. In the study, the mean value of platelet is 388.228 ± 141.5 µL with a minimum value of 80.51 µL and a maximum of 1052 µL. In this study, it was found that most of the patients experienced a partial response, as many as 23 patients (65.7%). Test statistics showed that there is a significant relationship between platelet / lymphocyte ratio in response to clinical patients with cancer of breast more local with a value of p value = 0.028 (p<0.05) and the odds ratio of 9.2.

Conclusion: There was a significant relationship between an increase in the platelet/lymphocyte ratio with a decrease in the response to neoadjuvant chemotherapy of CAF in patients with locally advanced breast cancer.

Keywords: PLR, Locally Advanced Breast Cancer, Chemotherapy Response, CAF

Relationship ratio CRP-albumin on neoadjuvant clinical response of CAF regimen chemotherapy in women with locally advance breast cancer in Dr. Soetomo Hospital

Lintong Darianto S. Damanik, Hantoro Ishardyanto, Iskandar Ali, Hartono Kahar
1 Resident of Surgery, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia
2 Staff of the Department of Surgery, Oncology Division, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia
3 Staff of the Department of Clinical Pathology, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia

Background: Breast cancer is the most common cancer in women and is the highest cause of death. Data in Dr. Soetomo Hospital show patient cancer breast came with a case of locally advanced breast cancer as much as 47% and 52% of the cases do not respond well to neoadjuvant chemotherapy. The presence of inflammation and the status of the nutrients are poorly related to the response of clinically against chemotherapy are low. The state of inflammation and status of nutrition it can be seen from the ratio between CRP with albumin.

Methods: The research was a prospective cohort design, on patients with locally advanced breast cancer. Patients performed the examination levels of albumin and CRP before the chemotherapy is given and carried out the measurement of the mass of the tumour with a physical examination. Then the patient underwent neoadjuvant chemotherapy with the CAF regime for 3 cycles and was examined for CRP, albumin, and tumour size again. Then evaluated for response to therapy.

Results: In this study, a total of 36 patients were obtained with 32 people (88.9%) with a low CRP/Albumin ratio and 4 people (11.1%) with a high CRP / Albumin ratio. From the clinical response found 0 people (0%) with progressive disease, 8 people (20%) with stable disease, 23 people (65.7%) with partial response and 5 people (14.3%) with complete response. Statistical test results showed that there was a significant relationship between CRP / Albumin ratio with chemotherapy response (p = 0.035).

Conclusion: It was obtained a significant relationship between the increased ratio of CRP / Albumin with a decrease in response to neoadjuvant chemotherapy of CAF in patients with Locally Advanced Breast Cancer.

Keywords: Locally Advanced Breast Cancer, CRP, Albumin, CRP/Albumin Ratio, Breast Cancer

Relationship between Tumour Infiltrating Lymphocytes (TIL) to the metastasis and stadium of breast cancer when diagnosed in DR. Sardjito General Hospital Yogyakarta

Muhammad Afief Perwira Setia, Sumadi Lukman Anwar, Herjuna Hardiyanto
1 General Surgery Resident, Department of Surgery, Dr. Sardjito General Hospital, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia
2 Staff of Surgical Oncology Division, Surgical Oncology Division, Department of Surgery, Dr. Sardjito General Hospital, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

Background: Breast cancer is the most common cancer in women and the highest cause of death. Data in Dr. Soetomo Hospital show patient cancer breast came with a case of locally advanced breast cancer as much as 47% and 52% of the cases do not respond well to neoadjuvant chemotherapy. The presence of inflammation and the status of the nutrients are poorly related to the response of clinically against chemotherapy are low. The state of inflammation and status of nutrition it can be seen from the ratio between CRP with albumin.

Methods: The research was a prospective cohort design, on patients with locally advanced breast cancer. Patients performed the examination levels of albumin and CRP before the chemotherapy is given and carried out the measurement of the mass of the tumour with a physical examination. Then the patient underwent neoadjuvant chemotherapy with the CAF regime for 3 cycles and was examined for CRP, albumin, and tumour size again. Then evaluated for response to therapy.

Results: In this study, a total of 36 patients were obtained with 32 people (88.9%) with a low CRP/Albumin ratio and 4 people (11.1%) with a high CRP / Albumin ratio. From the clinical response found 0 people (0%) with progressive disease, 8 people (20%) with stable disease, 23 people (65.7%) with partial response and 5 people (14.3%) with complete response. Statistical test results showed that there was a significant relationship between CRP / Albumin ratio with chemotherapy response (p = 0.035).

Conclusion: It was obtained a significant relationship between the increased ratio of CRP / Albumin with a decrease in response to neoadjuvant chemotherapy of CAF in patients with Locally Advanced Breast Cancer.

Keywords: Locally Advanced Breast Cancer, CRP, Albumin, CRP/Albumin Ratio, Breast Cancer
**Background:** An indicator of breast cancer's progression is metastatic status. Metastasis is a disease progression process that is the leading cause of cancer-related death. Tumour infiltrating lymphocytes (TIL) is currently an indicator in evaluating the development and prognosis of breast cancer. This study aims to determine the correlation of TIL level on metastatic status and stage of breast cancer at the first time diagnosed.

**Methods:** Retrospective cohort study with subjects diagnosed with breast cancer during the period of January to December 2019. The data obtained were analysed using the Chi-Square test with a P value <0.05 as a significant value.

**Results:** A total of 182 breast cancer patients met the inclusion criteria. From the TIL levels against metastasis and early stage at diagnosis both had a value of P=0.655. This results were not significant (P>0.05).

**Conclusion:** There is no significant relationship between the results of the TIL level calculation with metastatic status and the initial stage of breast cancer at the first time diagnosed at Dr. Sardjito General Hospital Yogyakarta.

**Keywords:** Breast Cancer, Tumor Infiltrating Lymphocytes, TIL, Metastasis, Early Stage

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**Profile of breast carcinoma with brain metastasis in Haji Adam Malik Hospital Medan**

**Fenny Nurafni, Kamal Basri**

Department of Surgery, Faculty of Medicine, Universitas Sumatera Utara, Medan, Indonesia

**Background:** Brain metastases are usually a sequela in breast cancer patients. Mucinous carcinoma is a rare subtype of breast cancer. Mucinous carcinoma has a good prognosis and rarely develops brain metastases. In total 987 patients had been treated with breast cancer with brain metastases at General Haji Adam Malik Hospital Medan during 2019-2020. Only 1 patient (0.101%) had mucinous carcinoma breast cancer that metastasized to the brain.

**Case Presentation:** A 67-years-old woman with a history of right breast erythema and oedema associated to breast pain.

**Keywords:** Primary Non-Hodgkin Lymphoma, Case Report, Breast

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**Primary non-Hodgkin lymphoma of breast: a case report**

**Puty Yudis Pramana Karang1, Ida Bagus Made Suryawisesa2**

1 Resident in General Surgery Department, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia

2 Lecturer of General Surgery and Oncology Department, of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia

**Background:** Primary breast lymphoma (PBL) is a rare disease accounting for 0.04–0.5% of all breast malignancies. This article reports a clinical case of a 67-years-old woman with a history of right breast erythema and oedema associated to breast pain.

**Case Presentation:** A 67-years-old woman with a history of right breast erythema and oedema associated to breast pain, with over three-months duration. Physical examination demonstrated mammary asymmetry and inflammatory signs with orange peel skin. She had the right upper limb swollen without palpable axillary and supraclavicular lymph nodes. The principal suspicion was an inflammatory breast cancer. Imaging was unspecific. Open biopsy of a malignant round cell tumour and of the breast mass identified morphological and immunohistochemical features consistent with diagnosis of primary non-Hodgkin DLBCL.

**Conclusion:** Breast lymphoma must be considered in the differential diagnosis of a breast lump, even in the presence of cutaneous inflammatory changes. PBL can be treated successfully with combined therapy.

**Keywords:** Primary Non-Hodgkin Lymphoma, Case Report, Breast
Prognostic factor of one year breast cancer recurrence after MRM procedure at dr. Sardjito Hospital Yogyakarta

Edwin Fernando¹, Herjuna Hardiyanto²
¹Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia
²Division of Oncology, Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia

Background: Breast cancer is the second leading cause of death due to the very high recurrence rate of breast cancer. However, there is no data regarding the recurrence of breast cancer that has undergone modified radical mastectomy surgery and the factors that influence the occurrence of recurrence.

Methods: Retrospective cohort study, on 109 MRM patients from 1 January 2019 – 1 August 2019 at Dr. Sardjito Hospital Yogyakarta who had a history of observation at least a year after MRM surgery. The study independent variables (age, tumour size, stage, positive lymph node status, histopathological grade, subtype) and study dependent variables (breast cancer recurrence 1 year after MRM surgery) were multivariate analysed using SPSS 12 and presented in the form of ODDS RATIO with 95% CI.

Results: The locoregional recurrence rate of breast cancer 1 year after modified radical mastectomy surgery at Dr. Sardjito Hospital Yogyakarta was 16.51%. Young age, large tumour size, positive lymph node invasion was not statistically significant associated with breast cancer recurrence 1 year after MRM surgery (p > 0.05). Meanwhile, high tumour stage (IIIB), high histopathological grade, and triple negative cancer subtype were statistically significant associated with breast cancer recurrence 1 year after MRM surgery (p <0.05).

Conclusion: Multivariate analysis with multiple logistic regression on 3 variables with p <0.05, obtained grading Histopathology OR: 4.971 95% CI: 0.515 - 48.017 and Triple negative OR: 10.458 95% CI: 1.031 - 106.134 which significantly affects recurrence breast cancer 1 year after MRM surgery.

Keywords: Prognostic Factor, Breast Cancer, MRM, Breast Cancer Recurrence

The correlation of age factor with the incidence of squamous cell cancer in Dr. Sardjito Hospital year 2018-2019

Andica Yoga Artanto¹, Herjuna²
¹Department of Surgery, Dr. Sardjito Hospital, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia
²Division of Oncology Surgery, Department of Surgery, Dr. Sardjito Hospital, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

Background: Squamous Cell Carcinoma (SCC) is a malignant tumour that attacks squamous epithelial cells. Squamous cell cancer is the second most common cancer in whites. In 2012, an estimated 700,000 cases of SCC are diagnosed in the United States, and between 3,900-8,800 people die from the disease. The incidence of SCC in men is 2-3 times more often compared to women because men are more often exposed to sunlight. The mortality rate of squamous cell carcinoma in men is higher. This study aims to determine whether age factor has a relationship with the incidence of Squamous Cell Carcinoma in Dr. Sardjito Hospital.

Methods: The research was made in a cross-sectional design. This research was conducted from January 2018 until June 2019 at Dr. Sardjito Hospital. The samples used were taken from all patients diagnosed with Squamous Cell Carcinoma (total sampling) diagnosed in Dr. Sardjito Hospital from January 2018 to June 2019. Data were analyzed using Spearman correlation.

Results: The results showed that patients with Squamous Cell Carcinoma were diagnosed in Dr. Sardjito are mostly came from the age group of 51 - 60 years old, which are 20 respondents (32,8%). After the analysis was done using Spearman Rank test, there is no age factor correlation with Squamous Cell Carcinoma incidence diagnosed in Dr. Sardjito Hospital, with the significance value on the result showed (p = 0.410 > 0.05)

Conclusion: There was no differences between age and incidence of squamous cell cancer.

Keywords: Age, Squamous Cell Carcinoma.
Distant metastases risk in breast cancer based on subtype: cross sectional study

Andreas Cahyo Nugroho¹, Teguh Aryandono², Sumadi Lukman Anwar²

¹Department of Surgery, Dr. Sardjito Hospital, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia
²Division of Oncology Surgery, Department of Surgery, Dr. Sardjito Hospital, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

Background: Breast cancer is one of the most malignant diseases in women. In 2018, GLOBOCAN data shows there were 2.08 million new cases with 626 thousand deaths worldwide, and in developing countries the incidence has increased by up to 5% per year. One of the leading causes of death in breast cancer is distant metastases. Currently, the management and determination of breast cancer is based on subclassification, based on the expression of estrogen receptors, progesterone receptors, HER2, KI67. This study was conducted to determine the risk factors in reducing the rate of distant metastases in breast cancer patients based on the intrinsic subtype. This study aims to determine whether there is a relationship between tumour subtypes and the risk of distant metastases in breast cancer.

Methods: This study was an analytic observational study with a retrospective cohort study design. Subjects studied were breast cancer patients who were treated at the Department of Surgical Oncology Dr. Sardjito from January 2014-December 2017 who met the inclusion criteria (patient diagnosed with breast cancer, female gender) and exclusion (incomplete medical record data, did not follow up), were studied retrospectively (medical record data). The collected data is edited, coded, and entered in a computer file. The data obtained were analyzed including univariate, bivariate, and multivariate. Processing of data that has been collected using the IBM SPSS Statistics 23 for Windows application.

Results: The research subjects were all breast cancer patients in Dr. Sardjito starting from 2014 to 2017 as many as 1300 samples. Patients on the subtype compared between Non-Luminal and Luminal experienced far metastases almost as much between Non-Luminal (44.3%) and Luminal (42.0%). Patients on subtypes compared between Non-Luminal A and Luminal A experienced far more metastases in Non-Luminal A (54.9%) compared to Luminal A (45.1%). Patients on the subtype compared between Non-Luminal B and Luminal B experienced far more metastases in Non-Luminal B (89.3%) compared to Luminal B (10.7%). Patients on subtypes compared between Non-HER 2 E and HER 2 E experienced much more metastases in Non HER 2 E (84.2%) compared to HER 2 E (15.8%). Patients on the subtype compared between Non TNBC and TNBC experienced much more metastases in Non TNBC (71.4%) than those with TNBC (28.6%).

Conclusion: There was no significant association between tumour subtypes: Luminal A, Luminal B, HER-2 E and TNBC with the incidence of distant metastases.

Keywords: Metastasis, Breast Cancer, Subtypes, Luminal, Triple Negative

Open venous cutdown of Chemoport implantation as alternative chemotherapy access in limited facilities

Puti Anda Tusta Adiputra
Surgical Oncology Division, Department of Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Denpasar, Bali, Indonesia.

Background: Chemoport implant is a vascular-accessing device for chemotherapy drugs delivery which can lower drug toxicity and the complications of peripheral venous access. Open venous cutdown techniques can be done in limited facilities, which not have intraoperative ultrasonography or fluoroscopy device. The blind Seldinger puncture was not recommended to do because it was higher complications. The Chemoport can be fitted to the patients by using open venous access technique for catheter insertion which is safer and more precise in vein identification.

Case Presentation: Female 40 years old, breast cancer patient who underwent chemotherapy but had difficulty in accessing peripheral veins. Chemoport was implanted by using cephalic vein cutdown and the catheter was inserted to the cephalic vein in the deltopectoral groove. This technique was selected due to its safety and has lower risk of pneumothorax, haemothorax, and major vascular injury compared to blind Seldinger technique. The limitation were only anatomical anomalies, such as absent of cephalic vein or small calibre of cephalic vein.

Conclusion: This open venous cutdown technique was safe and useful in limited facilities. The cephalic vein is clearly visible and poses no difficulty to insert the catheter.

Keywords: Chemoport Implantation, Cephalic Vein, Venous Cutdown, Alternative, Limited Facilities

The association between metabolic comorbidities and distant metastasis among breast cancer survivors

Roby Cahyono, Teguh Aryandono, Sumadi Lukman Anwar
Division of Surgical Oncology-Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia

Background: Breast cancer (BC) cause the highest cancer-related mortality among women in worldwide. Recent studies show the association between metabolic syndrome and poor outcome of BC. However, limited data show about the relationship of metabolic syndrome to distant metastasis outcome. This study aims to evaluate whether metabolic syndrome components including high body mass index (BMI), diabetes mellitus (DM) or glucose intolerance, dyslipidaemia, and hypertension are associated with distant metastasis among BC patients.

Methods: The design of study was observational with cross-sectional method. All non-metastatic BC patients who underwent surgery in Sardjito...
Survival rate of oral squamous cell carcinoma in Cipto Mangunkusumo Hospital

Diani Kartini, Shabrina Rizky Putri

1Department of Surgery, Cipto Mangunkusumo Hospital, Universitas Indonesia, Jakarta, Indonesia
2Department of Surgery, Cipto Mangunkusumo Hospital, Universitas Indonesia, Jakarta, Indonesia

Background: Oral cancer carcinoma is the 6th most frequent malignancy in Asia. In Cipto Mangunkusumo Hospital, most patients come in late stage. Yet, there is no survival study available for this disease in our country. This study aims on revealing the survival rate oral squamous cell carcinoma (OSCC) patients in Cipto Mangunkusumo based on the 8th AJCC staging.

Methods: We performed a retrospective survival analysis study from a database of OSCC patients diagnosed at Cipto Mangunkusumo Hospital in 2014-2018. Follow-up details were updated from medical record and by phone calls. Data was analysed using the Kaplan-Meier method.

Results: Majority of the patients were male (male-to-female ratio was 1.03:1) with the mean age was 51.12±13.821 years old. Tumours occurred mostly in the tongue (72.8%), and most patients were initially diagnosed as stage IV (83.4%). The one- and two-year overall survival rate were 58.6% and 43.1%, with a disease-specific survival rate was 66.9%. The worst one- and two-year survival rate was found constantly in the stage IV group (53.5% and 36.1%, consecutively). Though there was no statistically significant association between overall survival and clinical staging in this study (p > 0.05).

Conclusion: The low OSCC survival rate in Cipto Mangunkusumo Hospital indicated a high level of patient delay. Screening and education regarding this disease are needed to increase the survival rate.

Keywords: Oral Squamous Cell Carcinoma, Survival Rate, Clinical Staging.

Radiofrequency ablation for management of thyroid nodules: a case presentation

Kristanto Yuli Yarsa, Monica Bellynda

Department of Surgery, Faculty of Medicine, Universitas Sebelas Maret, Surakarta, Central Java, Indonesia

Thyroid nodules constitute a frequently seen clinical problem, and the incidence of thyroid nodules has increased with the recently increased use of thyroid ultrasonography (US). Although most thyroid nodules are benign and do not require treatment, some benign nodules may require treatment for associated symptoms and/or because of cosmetic problems.

Since RF ablation of thyroid nodules was introduced in 2006, it has been reported to be both safe and effective for treating benign thyroid nodules and recurrent thyroid cancer. Radiofrequency ablation (RFA) is an effective and safe method for treating benign thyroid nodules and recurrent thyroid cancers. Since 2012, thyroid RFA has been adopted worldwide, with subsequent advances made in devices and techniques, such as shorter and thinner electrodes, bipolar electrodes, virtual needle tracking systems, and unidirectional electrodes.

Keywords: Radiofrequency Ablation, Management, Thyroid Nodules

Ameloblastoma: a case report

Hanif Fauzie, Denny Rifsal Siregar

1Department of Surgery, Faculty of Medicine, Universitas Sumatera Utara, Medan, Indonesia
2Department of Surgery, Oncology Division, Faculty of Medicine, Universitas Sumatera Utara, Medan, Indonesia

Background: Ameloblastoma is a rare head and neck tumour with estimation incidence is 0.5 per million population. The tumour is usually asymptomatic and presents itself as a slowly enlarging facial swelling. Wide resection of the jaw is usually the recommended treatment for ameloblastoma, should priority be given to the recurrence rate. However, radical surgery often means that the patients have serious complications.

Case Presentation: A 58-year-old woman came to the Oncology Clinic of Royal Prima Hospital with chief of complaints of a lump on her right cheek since 5 months ago. Through anamnesis, physical examination and supporting examination with AP/L schedel X-ray examination, patient suspected with ameloblastoma. Hemi-mandibulectomy was performed with wide excision. The tissue is taken and examined in an anatomical pathology laboratory. The result is a monomorphic adenoma of salivary gland. The optimal surgical treatment of ameloblastoma should minimize recurrences, restore function and aesthetic and present a minimal morbidity. Wide resection of the jaw is usually the recommended treatment for ameloblastoma, should priority be given to the recurrence rate.

Conclusion: Ameloblastoma has a high rate of local recurrence if it is not adequately removed. In our patient, hemi-mandibulectomy and wide excision is a good choice of treatment.

Keywords: Ameloblastoma, Wide Excision, Hemi-Mandibulectomy
ABSTRACT

Case report of ameloblastic carcinoma of maxilla

Syarifa Waheeda Aldjufri1, Dwi Hari Susilo2
1Resident of Surgery, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia
2Staff of Head-Neck Surgery Division, Department of Surgery, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia

Background: Ameloblastic carcinoma (AC) is very rare, and has a poor prognosis. Two thirds of these tumours arise in the mandible and one third originate in the maxilla. Ameloblastic carcinoma shows the histological features of ameloblastoma and carcinoma. Tumours can metastasize and histological malignancy can be found in either primary, metastatic or both. This case study aims to evaluate the current management of ameloblastic carcinoma of maxilla.

Case Presentation: A 49-year-old man reported with a chief complaint of a lump in the palate felt in the past 5 months. There is no family history of the same disease. CT scan images show solid masses on the right and left palate extending to the left nasopharynx, the result of FNAB on the mass is pleomorphic adenoma. Pathology results show ameloblastic carcinoma. Ameloblastic carcinoma is a rare odontogenic neoplasm of malignant epithelium and may arise on its own or from a pre-existing odontogenic lesion. Ameloblastic carcinoma more often involves the mandible. In this case ameloblastic carcinoma involves the maxilla. Ameloblastic carcinoma can occur in various age groups. There is no clear gender predilection. The most common signs are swelling, including associated pain, rapid growth, trismus, and dysphonia. In this case the patient complained of a palatal lump, predominantly left side, which is felt to be slowly enlarging. The patient also complained of frequent ringing in the left ear, there were no other complaints. Radiographs of ameloblastic carcinoma were several radiopaque images that showed dystrophic calcification. Histopathological examination showed ameloblastic epithelium with palisading margins and ameloblastic epithelium in the stroma.

Conclusion: Increased cellularity, pleomorphism, mitosis with focal palisading and tumor tissue invading the desmoplastic stroma, confirming the diagnosis of ameloblastic carcinoma. Surgical correction is the treatment of choice.

Keywords: Ameloblastic Carcinoma, Ameloblastoma, Maxilla

Ameloblastic carcinoma of mandible: a case report

Heningtyas Suci Utomo1, Sunarto Reksoprawiro2
1Resident of Surgery, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia
2Staff of Head-Neck Surgery Division, Department of Surgery, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia

Background: Ameloblastic carcinoma is an odontogenic malignancy that combines the histological features of ameloblastoma with cytological atypia, even in the absence of metastasis. Ameloblastic carcinoma is a rare odontogenic tumor, which is about 1.5% -2.0% of all odontogenic tumors. This case study aims to evaluate the current management of ameloblastic carcinoma of mandible.

Case Presentation: A 49-year-old man reported with a chief complaint of a hard lump on the left side of mandible since 3 months. Extraoral examination, well circumscribed lump, hard consistency, spherical in shape and approximately 6 cm in diameter was present in the left side of mandible. From the intraoral examination, there was no mass or fistula, loosen teeth from the 2nd incisor to the second lower left molar was present. Panoramic radiograph and CT scan of the head was obtained and supported the diagnosis of a malignant primary bone tumor of the mandible. The patient underwent left hemimandibulectomy and reconstructed with K-wire. The histopathologic result of the operation was oval-nucleated odontogenic anaplastic cells, heavy pleomorphic, hyperchromatic, prominent core, sufficient cytoplasm, no pheipheral palisading lesion of of tumor, mitosis 36/10 HPF indicative for ameloblastic carcinoma.

Conclusion: Ameloblastic carcinoma is a rare case. Clinically it resemble as ameloblastoma, but the tumor grows progressively. The diagnostic criteria for differentiating a mandibular ameloblastoma and malignant primary bone tumor of mandible are clinical and radiological examination and definite diagnosis obtained by histopathology.

Keywords: Ameloblastic Carcinoma, Ameloblastoma, Mandibula

Management of giant thyroglossal duct cyst: a case report

Muhammad David Perdana Putra1, Joko Purnomo2, Kristanto Yuli Yarso2
1Department of Surgery, Faculty of Medicine, Universitas Sebelas Maret, Surakarta, Indonesia
2Department of Surgery, Oncology Subdivision, Faculty of Medicine, Universitas Sebelas Maret, Surakarta, Indonesia

Background: Thyroglossal duct cyst (TGDC) is a developmental abnormality in which the thyroglossal duct settles after the decline of the thyroid gland. TGDC is one of the asymptomatic congenital masses with 70% arising in the anterior midline of the neck, below the hyoid bone.

Case Presentation: A 57-year-old female patient presented with complaints of a lump in the middle of her neck that slowly enlarged. The lump was first realized around 10 years ago. When she swallowed, the lump also moved. The examination was performed by referring to the characteristics of thyroglossal cysts. The swelling was cystic, painless surrounded by healthy skin except for a small area that showed a sign of inflammation. The USG and MRI of the neck and MRI confirmed TGDC with a size of 120 x 100 x 50 mm. Management was undergone by surgery. We performed a surgical excision on the cyst and the central part of the hyoid bone (Sistrunk procedure) and sent the specimen for histopathological examination, to confirm the preoperative diagnosis.

Conclusion: TGDC diagnosis and management are not related to age or size. Operative management standards are carried out with Sistrunk procedures.

Keywords: Case Report, Giant Thyroglossal Duct Cyst, Sistrunk

Excision of facial infected seborrheic keratosis followed by a bilobed flap technique: a case report

I Wayan Pradnyana Mahardika1, Gede Kesuma Winarta2
1General Practitioner, Medical Faculty of Universitas Udayana, Bali, Indonesia
2Surgeon at Surgery Department, Bali Royal Hospital, Denpasar, Bali, Indonesia

ABSTRACT

Background: Seborrheic keratosis is a common benign tumor found in the elderly that usually does not require specific treatment. However, sometimes it can be inflamed and causing an infection that could be harmful. Management of infected seborrheic keratosis is challenging for patients as well as for healthcare providers due to the lack of definite criteria for diagnosis. Tumor excision, followed by a bilobed flap, was done. Bilobed flap is indicated due to the tissue adjacent to a cutaneous defect is insufficiently mobile to close the defect without causing tissue distortion. The biopsy result revealed seborrheic keratosis.

Conclusion: Bilobed flap is a flap technique that is popular due to its effectiveness in closing defects, especially in the nose and cheek area. It gives effective healing and good cosmetic results in the patient in this case report.

Keywords: Bilobed Flap, Face Reconstruction, Seborrheic Keratosis

Hemangioendothelioma in the left front tongue: case reports and review of literature

Otto Naftari1, Kiki Ahmad Rizki2
1General Surgery Resident, Universitas Padjadjaran, Hasan Sadikin Hospital, Bandung, Indonesia
2Consultant of Oncology Surgery, Universitas Padjadjaran, Hasan Sadikin Hospital, Bandung, Indonesia

Background: Epithelioid hemangioendothelioma (EH) is a rare vascular tumor, which was described first by Weiss and Enzinger. This tumor shows an intermediate malignant potential between hemangioma and angiosarcoma. EH rarely occurs in the oral cavity, to our knowledge, only 15 cases have been reported. In those cases, only two cases of EH in the tongue have been reported. The behavioral nature of EH in the tongue is unknown because of the rarity. We describe here the EH manifested in the tongue together with its immunohistochemical findings.

Case Presentation: A 54-years-old woman, came to Oral Surgery Policlinic Hasan Sadikin Hospital with a complaint of a lump on her left front tongue since three months before entering the hospital. Initially like mouth ulcer, gradually become a bigger lump. An examination of frozen dissection was carried out with the result found that no malignant tumor cells in the left anterior glosus, the entire incision boundary and the base of the incision contained tumor cells. On immunohistochemical examination found positive CD34 and positive K67, the conclusion is a hemangioendothelioma. In the left hemi-glossectomy and selective neck dissection, found tumor in the left tongue 1/3 of the front middle measure 2 x 1 x 1 cm and lymph nodes at level II and III measure 1 x 1 cm multiple sizes.

Conclusion: From the cases presented and the analyzed literature, it can be concluded that hemangioendothelioma of the oral cavity is rare and is often clinically misdiagnosed as a benign reactive lesion, thus requiring histological diagnosis. The histological picture is still controversial, posing diagnostic challenges sometimes due to the lack of definite criteria for diagnosis.

Keywords: Hemangioendothelioma, Left Front Tongue, Case Report

Pectoralis major myocutaneous flap for head and neck reconstruction

Oktahermoniza1, Heldrian Dwinanda Suyuthie1, Ari Oktavena1, Sondang Nora1, Daan Khambri1, Wirisma Arif Harahap2, Rony Rustam1, Azamris1
1Surgical Oncology Fellowship, Dr. M. Djamil Hospital, Universitas Andalas, Bandung, West Sumatera, Indonesia
2Surgical Oncology Consultant Dr. M. Djamil Hospital, Universitas Andalas, Padang, West Sumatera, Indonesia

Background: Cancer surgery in the head and neck area generally causes a wide defect and usually cannot be closed primarily or by using the surrounding tissue, thus a flap is needed. There are several types of flaps, namely local flaps, pedicle flaps, and free flaps. Although the free flap is currently the gold standard for reconstruction of the head and neck in developing countries, the resources for a free flap in most healthcare center are still lacking, as well as the large number of patients with poor economic and nutritional status. Thus, the pectoralis major myocutaneous flap (PMMF) remains popularly used. This case study aims to demonstrate how the pectoralis major myocutaneous flap can be used to cover large defects in head and neck surgery.

Case Presentation: A 46-years-old male patient with squamous cell carcinoma in the neck area, underwent wide excision procedure and the surgical defect was reconstructed with a pectoralis major myocutaneous flap. The results of reconstruction with pectoralis major myocutaneous flap were viable, and were functionally and aesthetically acceptable. There are no postoperative complications such as hematoma or abscess observed.

Conclusion: Pectoralis major myocutaneous flap was one of the main and easy to learn modalities for head and neck reconstruction surgery and it was acceptable functionally and aesthetically in situations where free flap could not be performed for one or many reasons.

Keywords: Head and Neck Cancer, Pectoralis Major Myocutaneous Flap, Reconstruction, Squamous Cell Carcinoma

Relationship of age with Length of Stay (LOS) in tongue carcinoma patients at Dr. Sardjito Hospital January 2013 to June 2019

Edwin Fernando1, Herjuna Hardiyanto2
1Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia
2Division of Oncology, Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia

Background: The incidence of tongue carcinoma occupies 1% of all body carcinomas and is the most common oral malignancy. Carcinoma of the tongue is located mostly on the anterior two-thirds of the tongue, usually on the lateral and lower edges of the tongue. One of the therapies performed in patients with tongue carcinoma is removal of malignant cells by the operative method. This study aims to analyze the relationship between Length of stay (LOS) and the incidence of tongue carcinoma at Dr. Sardjito General Hospital, Yogyakarta, Indonesia.

Methods: This type of research is quantitative. The method of this research is cross sectional. The study was conducted using a sample of all tongue carcinoma patients.
ABSTRACT

patients who were treated at Dr. Sardjito Hospital from January 2013 to July 2019. The analysis of this study was to use the correlation test.

**Results:** The results of this study indicate that there is no relationship between LOS and the incidence of tongue carcinoma

**Conclusion:** After doing the Spearman correlation analysis showed that there was no relationship between LOS and the incidence of tongue carcinoma.

**Keywords:** Carcinoma of The Tongue, Length of Stay

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**Musculoskeletal Surgery**

**Management of 3-month-old neglected talus neck fracture: a case presentation and review of literature**

Andriessanto Lengkong, Ryan Alvin Senduk

Department of Surgery, Faculty of Medicine, Universitas Sam Ratulangi, Manado, Indonesia

**Background:** Talus fractures are very rarely seen and account for approximately 1 percent of fractures around the foot and ankle. Talar neck fractures are likely to damage the anastomotic ring, resulting in disruption of blood supply to the talus body, which leads to significant problems in fracture healing and integrity. Approximately 39 percent of midfoot and ankle fractures could be missed during initial evaluation due to a lack of adequate radiological and clinical examination. This case study aims to evaluate the management of 3-month-old neglected talus neck fracture.

**Case Presentation:** A 30-year-old male patient came with complaints of swelling and pain over the right foot while walking for 3 months. He had a history of fall from stairs about 2 meters 3 months back. He was not come to hospital and go for traditional massage therapy. He presents to us 3 months later with chronic, dull achimg, swelling and conous pain while walking and standing. The diagnosis of neglected fracture neck of talus was made after radiology and manage by open reduction and internal fixation with cannulated screw.

**Conclusion:** The patient showed a good clinical outcome and returned to complete weight bearing in the previous activity level without pain following treatment.

**Keywords:** Talus Fracture, Management, Neglected

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**Functional outcome in short term follow up after total hip replacement in Prof Dr. R.D. Kandou Hospital, Manado**

Injilita Tangkuman\(^1\), Tommy Suhaardo\(^2\)

\(^1\)Department of Surgery, Prof Kandou Hospital, Universitas Sam Ratulangi, Manado, Indonesia

\(^2\)Department of Orthopedic, Prof Kandou Hospital, Universitas Sam Ratulangi, Manado, Indonesia

**Background:** Femoral neck fracture is one of the most common traumatic injuries in elderly patients and high-velocity trauma in younger patients. Immediate diagnosis and management are required to prevent threatening joint complications. Total Hip Replacement is one of the treatment options that replaces the hip joint with prosthesis. The treatment’s goal is to return the patient to premorbid capacity. Harris Hip Score is an assessment for the outcome of hip surgery. This research aimed to analyze the degree of hip function and the quality of life of patients after performed total hip replacement with metal-on-polyethylene prosthesis in RSUP Prof Dr. R.D. Kandou Manado in the period of January-December 2018.

**Methods:** Before surgery and 3-month post-surgery, the patients (N=34) were
evaluated with Harris Hip Score questionnaire. The collected data that consisted of Harris Hip Score were analyzed with paired t-test using SPSS 23.

**Results:** Most of the patients are in the elderly category of age and higher prevalence in women than men. The patients showed improvement in pain, functional capacity, deformity and range of motion (p<0.0001) at 3-month post-surgery.

**Conclusions:** Total Hip Replacement in patients with femoral neck fracture can provide significant results, improve function on activity daily living and ability of weight-bearing, function, range of motion, and stability.

**Keywords:** Femoral Neck Fracture, Harris Hip Score, Hip Function

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**Case evaluation of osteomyelitis at Wahidin Sudirohusodo Hospital in 2015–2017**

Agusni¹, Chairuddin Rasjad²

¹Department of Surgery, Faculty of Medicine, Universitas Hasanuddin, Dr. Wahidin Sudirohusodo Hospital, Makassar, Indonesia

²Division of Orthopedic, Department of Surgery, Faculty of Medicine, Universitas Hasanuddin, Dr. Wahidin Sudirohusodo Hospital, Makassar, Indonesia

**Background:** Osteomyelitis is an inflammation of the bones due to infection by microorganisms. Based on disease onset, osteomyelitis is divided into acute, subacute, and chronic osteomyelitis. Based on the pathophysiology of infection, it is divided into Hematogenous osteomyelitis and contiguous inoculation osteomyelitis. This study aims as a review and evaluation for improvements in the management of osteomyelitis.

**Methods:** A retrospective descriptive study through a review of the medical records of osteomyelitis patients who were hospitalized at Dr. Wahidin Sudirohusodo, Makassar, from the year 2015–2017. Data were processed using Microsoft Excel 2010, then univariate and bivariate data analysis was performed.

**Results:** Total patients with osteomyelitis were 58 patients, with a mean length of treatment days 14 days. Male patients were 45 patients and female patients were 13, with the largest age group being 20-29 years (22.4%) and ages 10-19 years (20.7%). The majority of cases were contiguous inoculation (93.1%). Positive cultures in 52 patients (89.6%) resulted in 71 cultures with Staphylococcus aureus as the major cause (38%). The sites of infection are mostly in the inferior limb; Tibia-Fibula (51.7%), Femur (36.2%). Debridement was performed in 45 patients and amputation in 9 patients.

**Conclusion:** The majority of osteomyelitis cases occur through direct contact, most of which are caused by gram-positive cocci. An operative is still the main choice in management.

**Keywords:** Hematogenous Osteomyelitis, Contiguous Inoculation Osteomyelitis, Debridement, Amputation

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**Cervical type II odontoid fractures in posttraumatic patients with posterior approach, screw rod fixation, and C-arm navigation Surgery: case report**

Yunes Ario Suardi, Roni Eka Sahputra

Department of Orthopedic Surgery, Dr. M Djamil Hospital, Padang, Indonesia

**Background:** Bone injury back of the neck in adolescents is rare occurs, the incidence is 0.2 to 0.5% of all fractures or dislocations and 1,5 up to 3% of all bone lesions back. In this age group bones common upper cervical exposed. Fracture of the odontoid process only involves a portion of the bone fracture back of the neck. This fracture usually involves the cartilaginous plate separates the odontoid process from the body axis. Fracture of the odontoid process post trauma rarely occurs in children adolescents less than 17 years. Because of supply impaired blood, treatment conservative for type II odontoid fractures ineffective. This condition is frequent need surgery. Cases odontoid fractures can result complications of ankylosing spondylitis.

**Case Presentation:** The case of a patient 16 years old girl described feeling pain in the neck after falling from a motorcycle 5 days ago. The patient cannot straighten up head and always turn to the left. Normal patient motor and sensory. X-ray examination and computed tomography (CT) shows the fracture odontoid type II at C2 and all fusion the spinal segment below C2. MR examination found interference continuity of the basilar part of the odontoid process. This patient was diagnosed with a fracture odontoid type II C2. On the patient is done C-arm navigation, posterior fusion operation and screw-rod fixation. After operation, pain in the patient’s neck is reduced and the patient can straighten his head.

**Conclusions:** Odontoid fracture cases can cause complications of spondylitis ankylose and its blood supply are impaired it is very important in giving next management plan. This case attracts the author’s attention to discuss more appropriate management.

**Keywords:** Odontoid Fracture Type II, Spondylitis Ankylose, Posterior Fusion Screw-Rod Fixation, C-Arm Navigation

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**Cystic thyroid nodules assessed with TIRADS score, FNAB, and possibility of malignancy: a case report**

William Stevenson, Nico Lumintang, Sherly Tandililing

Department of Surgery, Faculty of Medicine, Universitas Sam Ratulangi, Prof Dr. RD Kandou Hospital, Manado, Indonesia

**Background:** Thyroid nodules constitute by far the most common disorder of the endocrine system. Epidemiological studies have indicated that approximately 5% of women and 1% of men resident in iodine-sufficient areas have palpable thyroid nodules. Thyroid cysts represent enlarged fluid-filled regions of the thyroid that may be small or quite large. Diagnosis of a cystic thyroid lesion were made by ultrasound, and a thyroid aspiration biopsy. These cysts are commonly benign thyroid adenomas. This case report will describe cystic thyroid nodules patients with Ultrasound & FNAB assessment and confirm with pathologic examination.

**Case Presentation:** We examined five patients that came to our hospital with thyroid nodules from January to August 2020. All five patients underwent clinical examination, thyroid Ultrasound and FNAB. They were presented clinically euthyroid with cystic thyroid nodule with variable size from 3.5 to 8.5 cm based on Ultrasound and FNAB. TIRADS score of five patients were low (1 - 3). They did thyroidectomy surgery and specimens sent to pathologic anatomic department to confirm diagnosis. From five patients with cystic thyroid nodules three patients confirmed as benign and two patient confirmed as malignant based on pathologic examination. One patient with Follicular variant Carcinoma Papillary foci and the other one with Carcinoma Papilar Thyroid.

**Conclusion:** We can conclude that low TIRADS score (1-3) and FNAB results of cystic thyroid nodules that commonly considered as benign did not eliminate possibility of malignancy on pathologic examination. Complete investigation
Tuberculous spondylitis in children after decompression stabilization and implant malposition: a case report

Seprianto, Roni Eka Sahputra
Department of Orthopaedic Surgery, Department of Surgery, Dr M Djamil General Hospital, Padang, Indonesia

Background: Tuberculous spondylitis is an infection of the spine caused by the bacteria Mycobacterium tuberculosis. Symptoms include fever, night sweats, weight loss and appetite, spinal mass, kyphosis, sometimes associated with weakness of the legs and paraplegia. Medical treatment or a combination of medical and surgical can control tuberculosis spondylitis in some patients. This case study aims to evaluate the tuberculous spondylitis in children after decompression stabilization and implant malposition.

Case Presentation: A 9-year-old boy patient diagnosed with Paraparesis inferior frankle type C ec spondylitis TB with severe thoracolumbar region kyphosis, the child was subjected to decompression stabilization, spinal fusion and correction of kyphosis. The results were obtained after the action, the child's motor skills improved with the condition of the child being able to walk as usual with a normal body shape. However, the child experienced trauma 1 week before getting sick, came to the ER with complaints of weakness in both legs.

Conclusion: Tuberculous Spondylitis cases are very destructive, increase morbidity and including permanent neurological deficits and severe deformities. This case is interesting for discuss to more appropriate management for tuberculous spondylitis in children.

Keywords: Tuberculous Spondylitis, Children, Implant Malposition.

Left scapulothoracic dissociation with floating shoulder and grade IIIC open left clavicle fracture with ideberg type III scapula fracture: a rare case report

Yohannes Sugiarto¹, Andri Ruliananto Winoto², Muhammad Ali Shodiq³
¹Resident of General Surgery, Medical Faculty of Universitas Diponegoro, Dr. Kariadi General Hospital, Semarang, Indonesia
²Division of Orthopaedic Surgery, Medical Faculty of Universitas Diponegoro, Dr. Kariadi General Hospital, Semarang, Indonesia
³Division of Thoracic and Cardiovascular Surgery, Medical Faculty of Universitas Diponegoro, Dr. Kariadi General Hospital, Semarang, Indonesia

Background: A high-energy trauma can cause fractures involving clavicle, scapula, and moreover scapulothoracic dissociation with floating shoulder and vascular injuries. Early and correct diagnosis of fracture with vascular injury should be performed to prevent the patient from mortality. This case study aims to evaluate the left scapulothoracic dissociation with floating shoulder and grade IIIC open left clavicle fracture with Ideberg type III scapula fracture.

Case Presentation: A 19 years old male was on a motorcycle-truck accident which diagnosed with a rare left scapulothoracic dissociation with floating shoulder and grade IIIC open left clavicle fracture with Ideberg type III scapula fracture. The patient underwent arteriography, repair of the vascular injury, and open reduction internal fixation for the fracture.

Conclusion: A rare and complex case of scapulothoracic dissociation with floating shoulder and traumatic subclavian artery injury and also clavicle with scapula fractures require early recognition and a multi-disciplinary approach to manage the injuries.

Keywords: Scapulothoracic Dissociation, Floating Shoulder, Subclavian Artery Rupture, Scapula Fracture, Clavicle Fracture
Intraclavicular incision bilateral in child with emphysema subcutis and simple pneumothorax due to drowning: evidence based case report from rural hospital

M Agung Yudistira Permama1,3, Ni Ketut Agutiani Sudiar2, AA Istri A Wida Purnama Dewi3

1Faculty of Medicine, Universitas Lampung, Lampung, Indonesia
2Faculty of Medicine, Universitas Jendral Achmad Yani, Dustira Hospital, West Java, Indonesia
3Department of Surgery, Ba’a Regional Hospital, East Nusa Tenggara, Indonesia

Background: Drowning is defined as a condition in which acute respiratory disturbances result from immersion of the respiratory tract in a liquid, the third highest cause of death in the world. The process of holding breath can increase the pressure in the alveoli, water entering the respiratory tract will disrupt the surfactant layer, severe multi organ complications occur, such as cardiac arrest, acute respiratory failure, lactic acidosis even a death. Early resuscitation and management are very important to support the patient’s prognosis. This case report will discuss the journey and therapy of post-drowned patients in remote hospitals with limited equipment.

Case Presentation: A child 6-years-old was taken to the emergency room with a decrease in consciousness after drowning in the sea one hour before entering the hospital. The child had drowned for 10 minutes then helped without resuscitation and taken to the emergency room. GCS E2V1M4, RR 170x/ min, RR 48x/minutes, temperature 38.7°C and oxygen saturation 45%. During treatment, complications such as pneumothorax and massive subcutaneous emphysema occurred. The treatment was done with a minimal invasive infraclavicular incisions method and obtained good results and minimal complications.

Conclusion: Evaluation of pulmonary function and post-surgical complications are needed during the healing process.

Keywords: Drowning, Emphysema Subcutis, Pneumothorax

Obstruction due to ileum diverticulum band in a child: a rare case report from Rural Hospital

Valentina, Sutria Syati
Labuha Regional Hospital, North Maluku, Indonesia

Background: Meckel’s Diverticulum is the most common congenital abnormality of small intestine. The prevalence of Meckel’s Diverticulum is about 0.2–4% of the population, but complication is rare. In this case, we report suspected Meckel’s Diverticulum from Labuha Hospital.

Case Presentation: A 12-year-old boy was admitted to Labuha hospital with severe abdominal pain for six hours prior his admission. The pain was sudden yet continual in all area of abdomen but intense in umbilical and epigastrium. Other complaints were nausea, vomiting and constipation. The patient never had history of disease. No abnormality was found in laboratory findings, but anechoic lesion from USG was observed. The patient underwent laparotomy exploration. Intraoperative was found free clear fluid in peritoneal, discolored purplish ileum, and single diverticulum in ileum that formed a singular band causing obstruction. The patient showed good progression and given adequate antibiotic. The length of stay was 4 days until his full recovery.

Conclusion: Prompt treatment with limited access are possible in giving initial management for acute abdomen. In this case, we found acute abdomen sign and symptom in patient. During laparotomy exploration, we found obstruction due to ileum diverticulum band. The diagnosis of Meckel’s Diverticulum couldn’t be confirmed due to absent of histology examination, but the sign, symptom and location strongly led to be.

Keywords: Obstruction, Ileum Diverticulum, Children

Colon interposition as esophageal replacement in long-gap esophageal atresia: a case report

Kadek Deddy Ariyanta1, Kelvin Setiawan2
1Pediatric Surgery Division, General Surgery Department, Faculty of Medicine. Universitas Udayana, Sanglah General Hospital, Denpasar, Bali, Indonesia.
2General Surgery Department, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Denpasar, Bali, Indonesia.

Background: Esophageal atresia (EA) is one of the most frequent congenital anomalies of alimentary tract, affecting 1 in 4000 birth incidences. Additionally, some infants born with EA usually ‘accompanied’ with other associated anomalies. Some EA patients were born with Down syndrome, other atresia such as duodenal atresia, and other congenital abnormalities. The main objective of this study is to report our experience and set of treatments in newborn baby with LGEA and anorectal malformation, in this case, rectourethral fistula. Esophageal replacements using left colon interposition technique was performed as closing and final procedure.

Case Presentation: A 1-day-old male neonate was referred to our hospital emergency department with hypersalivation and imperforate anus. Patient could not swallow any breast milk. Suctioning of oral and nose orifice were done immediately to avoid any choking from saliva ingestion to respiratory tract. The patient had maternal history of polyhydramnios. Patient was born through vaginal delivery. 20 hours before admitted into our hospital. From X-ray examination, we recognized that the gastric tube was curled in esophagus before reaching stomach, and there wasn’t any bubble seen from patient’s stomach. Patient then was diagnosed with EA without fistula, and considered as long gap esophageal atresia. Therefore we set our treatment options on esophagus replacement surgery.

Conclusion: Long gap esophageal atresia (LGEA) still remains as one of the most challenging birth anomalies found in newborns, Paediatric surgeons are required to repair primarily, since patient’s own esophagus is the best conduit. However, when the gap’s distance makes it difficult for primary repair or previous attempts had failed, esophageal replacement methods are indicated.

Keywords: Colon Interposition, Esophageal Replacement, Long-Gap Esophageal Atresia

ABSTRACT

Congenital left hemidiaphragmatic agenesis: a case report

William Wijaya¹, Yustinus Rurie Wirawan²
¹Dr.(H.C) Ir.Soe-karno Hospital, Bangka Belitung, Indonesia
²Department of Surgery, Dr.(H.C) Ir.Soe-karno Hospital, Bangka Belitung, Indonesia

Background: Congenital diaphragmatic hernia is congenital malformation of diaphragm, characterized by herniation of abdomen viscera into the thoracic cavity. In extreme form of diaphragmatic maldevelopment, there might be a complete agenesis of diaphragm.

Case Presentation: We report a case of left hemidiaphragmatic agenesis with usual postnatal course. A 13-day old female infant was presented respiratory distress for a week. Chest radiograph showed left sided congenital diaphragmatic hernia. The patient underwent surgical exploration and found to have an unusual and large defect of left hemidiaphragm. The diaphragm was absent on posterior and lateral aspects of the chest wall and only small rim of diaphragm was presented on anterior aspect. The defect was identified as agenesis of left hemidiaphragm and successfully managed by suturing the posterior rim of diaphragm to the intercostal muscles.

Conclusion: This report describes successful management of hemidiaphragmatic agenesis without incorporating a prosthetic material.

Keywords: Congenital Diaphragmatic Hernia, Diaphragmatic Agenesis, Repair

Effect of pre-operative enterocolitis and without enterocolitis to Hirschsprung-associated enterocolitis incidence post soave and transanal endorectal pull through in Dr. Sardjito Hospital, Yogyakarta.

Ovi Asep Wahyudin¹, Akhmad Makhmudi²
¹Department of Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Dr. Sardjito Hospital, Indonesia
²Division of Pediatric Surgery, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Dr. Sardjito Hospital, Indonesia

Background: Hirschsprung Disease (HD) occurs when parasympathetic ganglia on bowel's wall fail to develop. Hirschsprung-Associated Enterocolitis (HAEC) is a common complication with the highest risk of morbidity and mortality. HAEC can occur pre-operatively or post-operatively. Research of HAEC incidence in RSUP Dr. Sardjito has been done before and as follow up the effect of pre-operative enterocolitis to post-operative HAEC incidence need to be analyzed. This study aims to know the effect of pre-operative enterocolitis to HAEC incidence post Soave and Transanal Endorectal Pull Through (TEPT), and to know the outcomes of HD.

Methods: Data were taken from patient’s medical records and assessed using Delphi method to diagnose HAEC. Then, data were statistically analyzed using SPSS.

Results: There were 77 patients. Post-operative HAEC was found in 75% patients with pre-operative enterocolitis and 11.6% patients without pre-operative enterocolitis (p: 0.001). Complications including Constipation 7.8%, soiling 7.8%, stricture of anastomosis 7.8%, wound dehiscence 6.5%, leakage of anastomosis 2.6%, Retraction of pull through segment 1.3%

Conclusion: There is a significant effect of pre-operative enterocolitis to post-operative HAEC incidence.

Keywords: Hirschsprung, Hirschsprung Associated Entero-colitis, pre-operative enterocolitis, Soave, TEPT.

Congenital Perineal Lipoma: A Rare Case Report

Muhammad Iqbal, Peri Eriad Yunir
Surgery Department, Medical Faculty, Universitas Andalas, Dr. M. Djamil General Hospital, Padang, Indonesia

Background: Perianal lipoma is a rare anomaly. A congenital perineal lipoma is a benign tumor seen in birth in the perineal area. In boys, they may be related to the accessory scrotum. In both sexes, they may follow anorectal malformation. These lesions can be antenatal for misdiagnosis of ambiguous genitalia. We report neonates with this rare condition being managed successfully.

Case Presentation: A male neonate was referred for the evaluation of a perianal mass. At the examination, there was an oval-shaped pedunculated tumour situated between the scrotum and the anus on the midline, of size 5x5 cm. He passed urine and stool smoothly. Complete blood counts, electrolytes, liver, and renal function tests, and urinalysis findings were all within normal ranges. The operative procedures at 3 months of age were as follows: an incision is made through the cutis and subcutis, to the base of the lipoma. Lipoma can be completely removed. Histological examination of the specimen showed mature adipose tissue interspersed with collagen bands, leading to a diagnosis of lipoma. He was discharged from the hospital without any complications and in a good defecation condition.

Conclusion: Congenital perineal lipoma is very rare and can be diagnosed antenatally by sonography. The diagnosis is completed after birth by physical examination, when it is mandatory to guard against associated anomalies. Sonography and MRI can also complete the diagnosis.

Keywords: Congenital Perineal Lipoma, Prenatal Ultrasound

Neonatal intestinal obstruction due to jejunal web

I Made Darmajaya,¹ Andre Ferryandri Susantio²
¹Department of Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia
²Department of Pediatric Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia

Background: Jejunal webs (type I jejunoileal atresia) are rare congenital anomalies of unclear etiology. Incomplete intestinal obstruction due to windsock web of the jejunum is uncommonly noticed in neonates. The second part of the duodenum is the most common site of windsock deformity. We present a female neonate, who was found to have features of incomplete intestinal obstruction due to windsock deformity in jejunum.

Case Presentation: A female baby, 8 days old, presented with vomiting since 2 days ago. The vomit was yellow colored with frequency of 10 times a day, the symptom was also accompanied with distention. There was no history of fever, defecation was said to be normal with yellow colored. On physical examination, patient had stable hemodynamic, distention of the abdomen...
Silent bowel perforation and double looping complicating ventriculoperitoneal shunt with trans-anal protrusion: a single case report

Yuda Adiyasa1, Prathita Amanda A2, Rudiyuwono R3, Happy Kurnia Brotoariantio1

1General Surgery Resident, Medical Faculty of Universitas Diponegoro, Dr. Kariadi General Hospital, Semarang, Indonesia
2Staff of Pediatric Surgery Department, Medical Faculty of Universitas Diponegoro, Dr. Kariadi General Hospital, Semarang, Indonesia
3Staff of Neuro Surgery Department, Medical Faculty of Universitas Diponegoro, Dr. Kariadi General Hospital, Semarang, Indonesia

Background: VP shunting is a procedure that commonly used to treat normal or obstructive-pressure hydrocephalus. VP shunt placement is accompanied by various complications such as menigitis, ventriculitis, and sepsis and may cause several rare abdominal complications, including intestinal pseudocyst, volvulus, and extrusion through the scrotum, colon, umbilicus, anus, vagina, bladder, or heart.1

Case Presentation: A 15-months-old boy who was treated at Dr. Kariadi Hospital who received a VP Shunt for Dandy Walker Syndromes at the age of 3 months. Twelve months after shunt placement, the catheter protruding from his anus after defecation. The catheter then spontaneously retracted into the rectum a moment later. His mother take him to the emergency department, but the catheter was not visible outside the anus. There is no sign of intracranial or abdominal infection but the catheter was not visible outside the anus. There is no nausea, vomiting, stomach-ache, or melena. There is no sign of intracranial or abdominal infection and review of literature

Dian Sulastri1, Kiki Akhmad Rizki2

1Resident General Surgery, Hasan Sadikin Hospital, Universitas Padjadjaran, Bandung, Indonesia
2Consultant on Oncology Surgery, Hasan Sadikin Hospital, Universitas Padjadjaran, Bandung, Indonesia

Background: Rhabdomyosarcoma (RMS), a tumour of skeletal muscle origin, is the second most common soft tissue sarcoma encountered in childhood after osteosarcoma. The common sites of occurrence are the head and neck region, genitourinary tract, retroperitoneum, and to a lesser extent, the extremities. Oral RMS is rare, and when occurring, it is more frequent in the soft palate. RMS is a highly malignant tumour with extensive local invasions and early haemorrhagic and lymphatic dissemination. Despite aggressive surgical resection and intensive combination chemotherapy, and radiation therapy, the outcome for patients remains poor.

Case Presentation: An 13-year-old girl was referred to our institution with painful swelling in her mouth. On history taking, her parents reported that the swelling was present for 1 year which was earlier small and painless but now has increased in size up to 8 cm x 6 cm. Computer tomography confirmed the presence of an extensive infiltrative lesion accompanied by severe bone resorption and in the absence of a primary lesion. Histopathology examination showed a red mass, lumpy, firm, and well defined. Anatomical pathology examination showed spindle cells in fibrovascular stroma with multiple mitosis, according to the Malignant Soft Tissue Sarcoma. The patient was referred to the tumor area. Rhomboid flap is one of the transpositional flap designs which is reported with very few complications. Adjuvant radiation therapy and postoperative neoadjuvant chemotherapy may be applied to the graft area.

Conclusion: The flap’s simplicity and efficacy make it a cosmetically superior flap with very few complications. Adjuvant radiation therapy and postoperative neoadjuvant chemotherapy may be applied to the graft area.

Keywords: Soft Tissue Sarcoma, Soft Tissue Sarcoma In Children, Rhomboid Flap
ABSTRACT

Conclusion: In children, any swelling should be carefully examined, and treatment outcomes should be regularly followed up. High degree of suspicion, early diagnosis, and a multidisciplinary treatment approach would be of great importance.

Keywords: Embryonal Rhabdomyosarcoma, Latissimus dorsi flap, Chemotherapy

Profile of Necrotizing Enterocolitis (NEC) at Saiful Anwar General Hospital in 2018 – 2019

Anni M.N Ziha Ul Haq1, Widanto2
1General Surgery Resident, Faculty of Medicine, Universitas Brawijaya, Saiful Anwar General Hospital, Malang, Indonesia
2Department of General Surgery, Paediatric Surgery Division, Faculty of Medicine, Universitas Brawijaya, Saiful Anwar General Hospital, Malang, Indonesia

Background: NEC is the most frequent and deadly gastrointestinal disease in preterm infants. This study aims to evaluate the profile of Necrotizing Enterocolitis (NEC) at Saiful Anwar General Hospital in 2018 – 2019

Methods: This descriptive study was conducted in the period 2018-2019 at the Department of Surgery, Division of Pediatric Surgery at Saiful Anwar General Hospital. Infants with a diagnosis of NEC. The variables studied included gender, age, length of stay, intervention, conditions before and after treatment, grade, and antenatal history.

Results: Within 2 years as many as 103 babies suffered from NEC among 412 babies who were treated in the perinatology ward at Saiful Anwar Hospital. Patients with grade I NEC were 59 patients (57.3%). The most common sex was male, 53 patients (51.5%). Most patients aged 0-28 days with a total of 94 patients (91.1%). Length of stay <20 days were 76 patients (73.8%) and treatment> 20 days were 27 patients (26.2%). The most common clinical symptom was an enlarged stomach in 42 patients (40.8%). Management of NEC cases at Saiful Anwar Hospital was Non-Operative Management for 76 patients (73.8%), laparotomy exploration in 16 patients (15.5%) and abdominocenteses in 11 patients (10.7%). Total patients who lived after undergoing treatment were 75 patients (72.8%) and 28 people died (27.2%). The number of NEC patients in the premature category was 58 patients (56.3%).

Conclusion: NEC is a deadly gastrointestinal disease in premature infants. The diagnosis of NEC depends on symptoms, physical and radiological examination.

Keywords: Necrotizing Enterocolitis, NEC, Neonates

The Effect of Ethanolic Extract from Moringa oleifera Leaves in Angiogenesis and Epithelization on Wistar Rats Burn Wound

Andy Supandi1*, Trilaksana Nugroho2, Neni Susilaningsih3, Awal Prasetyo2, Noor Wijayahadi2, Najatullah3
1Second Degree Student of Biomedic Science — General Surgery Resident of Universitas Diponegoro, dr. Kariadi General Hospital, Semarang, Indonesia
2Department of Biomedic Science, Universitas Diponegoro, Semarang, Indonesia
3Department of General Surgery – Division of Plastic and Reconstructive Surgery, Universitas Diponegoro, dr. Kariadi General Hospital, Semarang, Indonesia

Background: Burn wound causes a lot of morbidity. Silver sulfadiazine (SSD) is widely used for the treatment of burns. Moringa oleifera (MO) is herbal plant that proven can accelerate wound healing. This study aims to prove the effect of ethanolic extract from MO leaves in angiogenesis and epithelization on Wistar rats burn wound.

Method: This study was randomized post-test only with control group design. 24 male Wistar rats induced burn wound and randomly divided into 4 groups which given topical medicine once daily for 10 days. Treatment groups included: I (MO leave’s extract 10%), II (SSD + MO leave’s extract 10%), III (SSD), and IV (negative control). VEGF expression assessed using Allred score and Kruskal-Wallis test. New capillary vessels count assessed using Hamaetoxylin-Eosin staining and One Way ANOVA test. Epithelization percentage assessed macroscopically and Kruskal-Wallis test. Correlation was tested using Spearman test.

Results: VEGF expression showed no significant difference (p=0.550). A significant increase in new capillary blood vessel count seen in group I compared to III and IV (p=0.001; 0,000) and group II compared to III and IV (p=0.000;0,000). Significant difference also seen in the percentage of epithelization between group I and III and IV (p=0.042;0.011) and group II with IV (p=0.014). Positive correlation was found between new capillary blood vessel count and epithelization percentage (p=0.001) with strong correlation (r=0.662).

Conclusion: Ethanolic extract from Moringa oleifera leaves proved to be effective in increasing new capillary vessel count and epithelization percentage.

Keywords: Moringa oleifera, Silver Sulfadiazine, VEGF Expression, Angiogenesis
Comparison of effectiveness of the Platelet Rich Plasma (PRP) and Platelet Poor Plasma (PPP) toward chronic wound healing in white Rat (Rattus norvegicus)

Muhammad Chaizir¹, Safrizal Rahman², Mirnasari Amirisyah¹, Imam Hidayat², Nanta Aulia¹, Noer Faisal Darmi¹

¹General Surgery Resident, Faculty of Medicine, Universitas Syiah Kuala, Zainoel Abidin Hospital, Banda Aceh, Indonesia
²Staff of Surgery Department, Faculty of Medicine, Universitas Syiah Kuala, Zainoel Abidin Hospital, Banda Aceh, Indonesia

Background: A chronic wound is defined as a wound that failed to proceed though the normal phase of wound healing due to growth factors deficiency. Platelet Rich Plasma (PRP) and Platelet Poor Plasma (PPP) retain growth factors that can accelerate the healing process of bones and soft tissues. This study aimed to compare the effects of PRP and PPP administration on the chronic wound observe the cellular changes that occur during chronic wound recovery in white rats.

Methods: This study is an experimental study using a post-test only control group design and using 27 male white rats who had chronic wounds as sample and divided into 3 groups. Group 1 (control group), the wounds were cleaned with a physiological sodium chloride solution; group 2, the wound was covered with PRP gel and group 3, the wound was covered with liquid PPP. The wound healing rate was measured and evaluated macroscopically and histopathologically on the 3rd, 7th and 14th day after treatment.

Results: In the PRP and PPP groups, the wound healing was faster than the control group, the acceleration rate of wound healing between groups was determined at day 3 (p=0.000), day 7 (p=0.000) and day 14 (p=0.000). The mean histopathologic scores of epithelialization, collagen density, new vascular formation and inflammation were significantly better in the PRP and PPP groups than in the control group. Local administration of PRP and PPP increased rate of chronic wound healing processes both macroscopically and microscopically (degree of epithelialization, collagen density, formation of new blood vessels and implanted cells) in white rats (Rattus norvegicus).

Conclusion: Topical PRP was more effective than PPP in acceleration rate of wound healing process in white rats (Rattus norvegicus).

Keywords: Platelet Rich Plasma, Platelet Poor Plasma, Wound Healing, Chronic Wounds

Case evaluation of burn injury in the burn injury unit Dr. Wahidin Sudirohusodo Hospital, Makassar: prognosis, mortality, sirs parameters, base excess analysis of blood gas, bacterial culture and antibiotic sensitivity 2016-2018

Glendy¹, Fonny Josh²

¹Surgery Department, Faculty of Medicine, Universitas Hasanuddin, Makassar, Indonesia
²Plastic and Reconstruction Surgery Division, Surgery Department, Faculty of Medicine, Universitas Hasanuddin, Makassar, Indonesia

Background: Leucocytes, Procalcitonin, and Base Excess blood Gas analysis are SIRS parameters that potential to predict the prognosis and mortality of burn injury. This study aims to find the most effective marker out for patients with a burn injury with suspected sepsis.

Methods: This is retrospective-descriptive research, by retrieving data from medical records of burn injury patients from Medial Record Installation Dr. Wahidin Sudirohusodo Hospital from January 2016-December 2018. The data then processed and analyzed using Pearson Correlation and Chi-Square.

Results: This study included 184 patients with burn injury. There are 33 mortality cases (17.9%) where 27 cases experienced leucocytosis (81.9%) and leukenopia in 5 cases (15.1%). 13 mortality cases underwent procalcitonin examination and found increased (100%). 15 mortality cases underwent blood gas analysis and found negative, normal, and positive base excess results in 7 (46.6%), 3 (20%), and 5 (33.3%). Then processed and analyzed using Pearson Correlation and Chi-Square if p < 0.05 we concluded there are correlated between the SIRS parameter (leucocytes, Base Excess, and Procalcitonin) and mortality.

Conclusion: Early Leukocyte, Base Excess, and Procalcitonin examination should be recommended for any burn injury patients with suspected sepsis.

Keywords: Burns, Mortality, SIRS, Sepsis, SIRS Parameters

Characteristics of mandibular defect affecting functional outcomes following mandibular reconstruction using free fibula flap

Parintosa Atmodiwirjo, Diani Kartini, Ciputra Linardy, Mohamad Rachadian Ramadan, Sara Ester Triatmoko

Department of Surgery, Universitas Indonesia, Cipto Mangunkusumo Hospital, Jakarta, Indonesia

Background: Mandibular reconstruction utilizing free fibula flap is essential in restoring the function, and aesthetics outcomes post mandibular tumour resection. This study looks into the characteristics of mandibular defect affecting functional outcomes such as swallowing, speaking, eating, and quality of life on patients undergoing post-mandibullectomy mandibular reconstruction using free fibula flap.

Methods: We performed a cross-sectional study that includes patients who underwent post-mandibullectomy mandibular reconstruction using free fibula flap at Cipto Mangunkusumo Hospital in 2014-2019. Mandibular defect class, defect length, the number of mandibular subunits, defect extension, and the...
The effect of ethanolic extract from Moringa oleifera leaves in angiogenesis and epithelization on Wistar rats burn wound

Andy Supandi1, Trilaksana Nugroho2, Neni Susilaningsih3, Awal Prasetyo2, Noor Wijayahadi2, Najatullah3
1Second Degree Student of Biomedical Science, General Surgery Resident of Universitas Diponegoro, Dr. Kariadi General Hospital, Semarang, Indonesia
2Department of Biomedical Science, Universitas Diponegoro, Semarang, Indonesia
3Department of General Surgery, Division of Plastic and Reconstructive Surgery, Universitas Diponegoro, Dr. Kariadi General Hospital, Semarang, Indonesia

Background: Burn wound causes a lot of morbidity. Silver sulfadiazine (SSD) is widely used for the treatment of burns. Moringa oleifera (MO) is herbal plant that proven can accelerate wound healing. This study aims to prove the effect of ethanolic extract from MO leaves in angiogenesis and epithelization on Wistar rats burn wound.

Methods: This study was randomized post-test only with control group design. 24 male Wistar rats induced burn wound and randomly divided into 4 groups which given topical medicine once daily for 10 days. Treatment groups included: I (MO leave’s extract 10%), II (SSD + MO leave’s extract 10%), III (SSD), and IV (negative control). VEGF expression assessed using Allred score and Kruskal-Wallis test. New capillary vessels count assessed using Haematoxylin-Eosin staining and One Way ANOVA test. Epithelization percentage assessed macroscopically and Kruskal-Wallis test. Correlation was tested using Spearman test.

Results: VEGF expression showed no significant difference (p=0.550). A significant increase in new capillary blood vessel count seen in group I compared to II and IV (p=0.001; 0.000) and group II compared to III and IV (p=0.000;0.000). Significant difference also seen in the percentage of epithelization between group I and III and IV (p=0.042;0.011) and group II with IV (p=0.014). Positive correlation was found between new capillary blood vessel count and epithelization percentage (p=0.001) with strong correlation (rho=0.662).

Conclusion: Ethanolic extract from Moringa oleifera leaves proved to be effective in increasing new capillary vessel count and epithelization percentage.

Keywords: Moringa oleifera, Silver Sulfadiazine, VEGF Expression, Angiogenesis

The effect of dried amnion membrane application in the expression of platelet derived growth factors in the healing process of stomach stab wound: study on New Zealand Rabbit

Yipno Wanhar1, Fendy Matulatan2, IGB Adria Hariastawa3
1Resident of Surgery, Faculty of Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia
2Staff of the Pediatric Surgery Division, Department of Surgery, Medicine, Universitas Airlangga, Dr. Soetomo General Hospital, Surabaya, Indonesia

Background: Management of penetrating abdominal trauma, especially those affecting the stomach, keeps developing. A lot of research is being done to improve the tissue healing process, including a variety of surgical techniques and material uses. The amniotic membrane is a material that is widely used to help stimulate the healing process. The amniotic membrane contains growth factors, one of which is platelet-derived growth factor (PDGF). This study aims to investigate the differences in PDGF levels in gastric rupture repair with dry amniotic membrane as a biological dressing compared to primary repair of gastric rupture without using dry amniotic membrane.

Methods: This research was an experimental analytical study, using 42 samples of rabbits which were grouped into 2 groups, namely the control and treatment groups. Stab wound of 2 cm by 0.5 cm wide with a depth entire gastric wall in gastric corpus was done and repaired with 4-6 interrupted suture using 5/0 polypropylene monofilament. In the control group, the wound was only sutured and the treatment group, dry amniotic membrane was applied before suturing. The expression of PDGF was examined from the suture tissue on day-7.

Results: Intensity score was obtained in the treatment group with the highest score of 2 with a sample of 11 (52.4%) as well as in the control group as many as 13 (61.9%) samples who had a score of 2. The extension score was obtained in the treatment group with the highest score of 1 with a total sample size of 10 (47.6%) while the control group had the highest score with a score of 0.5 as much as 14 (66.7%). After obtaining the PDGF intensity and extension values, then these two values are multiplied to get the PDGF expression. From the results of the comparison test using the Mann Whitney test, it was found that the difference in PDGF expression was significant between the treatment group and the control group with p = 0.010 (p <0.05).

Conclusion: Applying dry amniotic membrane to the wound on the stomach will increase the expression of PDGF in the wound area.

Keywords: Dry Amniotic Membrane, PDGF, Gastric Penetrating Trauma

split thickness skin graft as a procedure to resurfacing open wound after excision of hypertrophic scar due to burn injury: a case report

Andre Dwi Gustiano1, Benni Raymond2
1General Surgery Resident, Faculty of Medicine, Universitas Andalas, Dr. M Djamil General Hospital Padang, West Sumatera Province, Indonesia
2Plastic Surgery Division, Faculty of Medicine, Universitas Andalas, Dr. M Djamil General Hospital Padang, West Sumatera Province, Indonesia

Results: Our patients had no complications, such as wound infection, fluid accumulation, or seroma. The results of the comparison test using the Mann Whitney test, it was found that the difference in PDGF expression was significant between the treatment group and the control group with p = 0.010 (p <0.05).

Conclusion: Applying dry amniotic membrane to the wound on the stomach will increase the expression of PDGF in the wound area.

Keywords: Dry Amniotic Membrane, PDGF, Gastric Penetrating Trauma

split thickness skin graft as a procedure to resurfacing open wound after excision of hypertrophic scar due to burn injury: a case report

Andre Dwi Gustiano1, Benni Raymond2
1General Surgery Resident, Faculty of Medicine, Universitas Andalas, Dr. M Djamil General Hospital Padang, West Sumatera Province, Indonesia
2Plastic Surgery Division, Faculty of Medicine, Universitas Andalas, Dr. M Djamil General Hospital Padang, West Sumatera Province, Indonesia
**ABSTRACT**

**Backgrounds:** Hypertrophic scarring (HTS) is a major concern in deep dermal thickness burn injuries. A scar generally forms within weeks of insult, and studies indicate that a wound that takes longer than 2–3 weeks to heal is characterized by an increased risk of hypertrophic scar formation. The incidence of HTS occurrence following burn injuries has been reported to range from 32 to 94%. This condition can be associated with significant pain and limited movement when present over joints. Aside from these symptomatic and functional elements, the ultimate unsightly aesthetic appearance of hypertrophic scars can be a great psychological burden for affected patient.

**Case Presentation:** A 22-year-old male patient complaining of hypertrophic scar on the right forearm. Hypertrophic scar is found almost all over the volar. Patient with history of burn injury 7 months before. The patient had burns with deep dermal depth in the area. There is no operation in the treatment of burns of the patient, only conservatively. The wound healed after 12 days of hospitalization, followed by a control at the Plastic Surgery Outpatient Polyclinic. Scar tissue appears 4 weeks after completion of treatment and along with the time the scar tissue expands and increases until hypertrophic scars form.

**Conclusion:** Split-thickness-skin-graft (STSG) is a suitable therapy for surface renewal or resurfacing in large open wounds after extensive excision of hypertrophic scars. It provides soft tissue of proper thickness with good pliability and keeps the upper limb free of stiffness of distant flaps.

**Keywords:** Split-Thickness-Skin-Graft, Hypertrophic Scar, Open Wound, Burn Injury

**Keystone flap abdomen inguinal**

Abdul Rauf Rachim, Andly Resando Mallo, Mendy Hatibie Oley

Surgery Department, Plastic Surgery Division, Prof Dr RD Kandou Hospital, Manado, North Sulawesi, Indonesia

**Background:** The flap was described by Behan in 2003. Reconstruction of complex defects of the anterior abdomen and inguinal are both challenging and technically demanding for reconstructive surgeons. The objectives in abdominal wall reconstruction are consistent and include the restoration of abdominal wall integrity, protection of intraabdominal viscera, and the prevention of herniation.

**Methods:** Three samples with abdominal defect after surgical procedure at Prof Dr RD Kandou Hospital from February to May 2020.

**Results:** Keystone flap can be used to cover large defect in the abdominal wall and inguinal after tumour removal with good success. The anatomical features of inguinal defects in the particular location between the abdominal and the thigh, and in the vicinity of the anogenital region, make the reconstruction of the inguinal region challenging for the Plastic surgeon. The authors review patient keystone flap that can be utilized in the reconstruction of these complex clinical cases of the anterior abdomen and inguinal defect. These three samples were submitted to demonstrate the successful closure of large defect the abdominal wall and inguinal after surgical removal of the tumour.

**Conclusion:** Keystone flap is a fairly easy defect reconstruction, is very reliable and has low morbidity and complication

**Keywords:** Keystone Flap, Abdominal Wall, Inguinal

**Case evaluation of burn injury at Wahidin Sudirohusodo Makassar Hospital in 2014-2018**

Maria Ida Rettobyaa, Sachraswaty R. Laidding

Division of Plastic Surgery, Department of Surgery, Faculty of Medicine, Universitas Hasanuddin, Makassar, Indonesia

**Background:** This study aims to evaluate patients' profile, extent and depth of burns and their operative management, to reduce morbidity and mortality that can happen.

**Methods:** Descriptive retrospective by collecting data from medical records of Wahidin Sudirohusodo Hospital Makassar from January 2014 until December 2018.

**Results:** A total of 432 burn patients consisted of 337 male patients (78%) and 95 female patients (22%), ratio of 3.5:1 with the most age in the second decade in age group 25-29 years and 20-24 years mostly caused by thermal burns (heat) 361 patients (84%), electric burns 69 patients (16%) and chemical burns 2 patients (0%). The most dominant degree of wound depth II and the most extensive area is 20-29% and the most frequent operative management is debridement.

**Conclusion:** Burns must be diagnosed and treated according to their severity as soon as possible. Clinical status at initial presentation, breadth and depth, therapeutic options and operative measures are important in determining prognosis so as to prevent patient mortality.

**Keywords:** burn injury, thermal burns, electric burns, chemical burns
ABSTRACT

A rare case study of Primary Central Nervous System Lymphoma (PCNSL) in young adult woman: stereotactic biopsy in brainstem region

Ayu Prima Kusuma Putri, Tommy Alfandy Nazwar, Yooyok Subagyo, Ro’di Nur Fajri
Department of Surgery, Faculty of Medicine, Universitas Brawijaya, Malang, Indonesia

Background: Primary Central Nervous System Lymphoma (PCNSL) is a rare type tumor, the incidence is less than 1% from all of intracranial mass and 4-6% from all Extranodal Non-Hodgkin Lymphoma (NHL). These tumors are common in the 5th until 7th decades of age and mostly occur in periventricular area and brain hemisphere. Tumor in brainstem and cerebellum are rare case. We report a case of a young adult woman with diffuse large B cell lymphoma in the frontal sinistra, periventricular lateral sinistra, midline mesencephalon, posterior ventricle IV, and cerebellum in an immunocompetent patient.

Case Presentation: A 26-year-old woman complained blurring vision, especially on the right side, intermittent and became beer with dexamethasone therapy. Other complaints are photophobia, dizziness, nausea, and slight tremors. 3 months ago, the patient undergoes VP shunt because of hydrocephalus. Previously, the patient complained severe headaches and did not become beer with medical therapy. 1 month after undergoing VP shunt, MRI with contrast was done and no abnormalities were found. Repeated MRI is performed on the patient, showing multiple masses in the mesencephalon, cerebellar, 3rd ventricle, and frontoparietal regions. The diagnosis before biopsy was lymphoma cerebri with Ependymoma as differential diagnosis. To make a diagnosis, a histopathological examination must be performed. Sampling was taken using stereotactic biopsy technique. The result of histopathological examination was correct that the mass showed Primary Central Nervous System Lymphoma (PCNSL).

Conclusion: Lymphoma in the brainstem (mesencephalon) and cerebellum region is very rare. Symptoms and radiological examination alone are not sufficient to establish a definite diagnosis. The definite diagnosis is by histopathological examination. This type of PCNSL must be very careful especially for taking a biopsy for histopathological examination. An accurate diagnostic examination is required for the accuracy of the therapeutic modality.

Keywords: Primary Central Nervous System Lymphoma, Streotactic Biopsy, Magnetic Resonance Imaging

Comparison of bone graft storage effectiveness by cryopreservation and subcutaneous in patients conducted craniectomy decompression 2019

Yogi Mahery, Anugerah Onie, Theodorus
Department of Surgery, Faculty of Medicine, Universitas Sriwijaya, Palembang, Indonesia

Background: Decompression craniectomy is a surgical method used to immediately relieve intracranial pressure. Knowing the comparison of the effectiveness of bone graft storage on Cryopreservation and subcutaneous to the risk of infection in patients undergoing decompression craniectomy in dr. Moch Hoesin Palembang General Hospital.

Methods: The research design used was a paired clinical trial in the form of open label. The data obtained in this study were descriptive analysis carried out on all research variables to obtain the mean and standard intersections. Data normality test with the Shapiro-Wilk test, data is normally distributed if p > 0.05 . Homogeneity test was done by Levene’s Test. Data is declared homogeneous if p > 0.05. To determine the effectiveness of the McNemar test was carried out. The population in the study were all patients who underwent craniectomy at dr. Mohammad Hoesin Palembang General Hospital. The sample criteria were patients with head injuries, haemorrhagic CVD, and brain tumours.

Results: Of the 30 research samples, the analysis of significance using the Mann Whitney test showed that the value of p=0.381. This means that there is no significant difference. The analysis of significance using the McNemar test showed that the value of p = 0.003 . This means that there is a significant relationship between the storage group in the subcutis and the storage group at cryopreservation (p < 0.05).

Conclusion: There was a significant difference in the effectiveness between subcutis and cryopreservation storage on the number of leukocytes and the incidence of infection in patients undergoing craniectomy.

Keywords: Cranectomy And Cranioplasty, Subcutis, Cryopreservation, Infection

Classic perioperative paralysis: a case report

Igor Rizkiya Syahputra¹, Tommy Supit¹, Chandra Aquino Tambunan², Udi Suhono²
¹Department of General Surgery, Faculty of Medicine, Universitas Diponegoro, Dr. Kariadi General Hospital, Semarang, Indonesia
²Department of General Surgery, Bendan General Hospital, Pekalongan, Indonesia

Background: Peripheral nerve injury resulting from patient positioning is a perioperative complication and a contributor to patient morbidity. Perioperative peripheral nerve injury accounted for 15% of injuries caused by patient positioning.

Case Presentation: We present a 23-years-old woman who came to the hospital outpatient center two days after underwent a breast surgery to remove the lump in the right upper quadrant of the right breast. The patient complained weakness of the right upper extremity. After further investigation, it was revealed that the patient was positioned with hyperabduction of the right.
arm during the surgery. Clinical diagnosis of classic perioperative paralysis caused by brachial plexus injury was made.

**Conclusion:** Classic perioperative paralysis is a rare complication due to patient positioning during a surgery. Surgeons should inform this probability of complication with the patient and the operation team should be aware to minimize the risk factors.

**Keywords:** Classic Perioperative Paralysis, Peripheral Nerve Injury, Brachial Plexopathy, Case Report

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**Comparison of acute pain, hemodynamic status, and side effects in low back pain patients after post laminectomy between the administration of intravenous oxycodone adjuvant therapy with fentanyl patch**

Sunanda Naibaho¹, Tjok Gde Bagus Mahadewa², Tjok Gde Agung Senapati³

¹Department of Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia
²Department of Neurosurgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia
³Department of Anesthesia and Intensive Therapy, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia

**Background:** Good control of post laminectomy pain is a determining factor for the success of laminectomy. Although intravenous opioids are widely used, lately fentanyl patches have begun to be considered with the same effectiveness and lower side effects. In this study, an acute comparison of hemodynamic status and side effects in low back pain patients post laminectomy with intravenous oxycodone adjuvant therapy was compared with fentanyl patches.

**Methods:** This research is a prospective cohort study by taking a subject of low back pain post laminectomy at Sanglah General Hospital. The research subjects who approved informed consent, then observed visual analogue scale differences, hemodynamic status, and side effects between groups who received intravenous oxycodone and fentanyl patches. Data were recorded, tabulated, and analyzed with SPSS 16.

**Results:** This study included 22 subjects who received intravenous oxycodone and fentanyl patch. From VAS 0, 30 and 60 minutes, only in the 60th minute after analgesic administration had significant differences were observed (p=0.005). In this case intravenous oxycodone was significantly better at reducing pain (0.5 vs 1.23) than fentanyl patches. From hemodynamic status, only respiration rates were found that were significantly higher in the intravenous oxycodone group (p=0.037) although not clinically significant (14.73 vs. 15.50). No side effects were found in either group.

**Conclusion:** There is a difference in pain in low back pain patients with the use of intravenous oxycodone with fentanyl patch, where the effect appears only after 60 minutes. There were no side effects of tightness, nausea and vomiting between the two groups.

**Keywords:** Low Back Pain, Laminectomy, Intravenous Oxycodone, Fentanyl Patch, Pain.

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**Case report: a 44-years-old male with severe head injury, epidural hematoma, and multiple laceration wound**

Victor J. S. Simanjuntak ¹, Tommy Supit¹, Happy Kurnia Brotoarianto²

¹Department of Surgery, Medical Faculty of Universitas Diponegoro, Semarang, Indonesia
²Sub Division of Neurosurgery, Dr. Kariadi Central General Hospital, Medical Faculty of Universitas Diponegoro, Semarang, Indonesia

**Background:** COVID-19 has a profound effect on emergency department (ED) visits. Severe traumatic brain injury (TBI), is one of the most common reasons for ED visits and one of critical conditions in the department of neurosurgery, requires an early and effective treatment, especially surgery. This case report aims to evaluate the management of head injury during coronavirus pandemic.

**Case Presentation:** A 44-years-old male with severe head injury, epidural hematoma, and multiple laceration wound was admitted. Physical examination showed general appearance was severely ill, GCS E1M1Vet, and anisocoric pupil. The patient was undergoing head CT and found hemorrhage in his head. The patient was diagnosed with severe head injury GCS E1M1Vet, EDH on right temporo-basal region, multiple laceration wound and scheduled for craniotomy surgery.

**Conclusion:** Emergency surgery of traumatic brain injury under unclear diagnosis of COVID-19 was challenging on how to protect both medical staff and the patient. In TBI with suspected or confirmed COVID-19 management, preoperative screening was crucial. Surgical personnel should take level III protection. Optimal surgical scheme, proficiency surgical skill, reduced surgical steps on the principle of damage control and shortening of operation time were also important.

**Keywords:** Severe Head Injury, Epidural Hematoma, And Multiple Laceration Wound

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**Epidural Hematoma (EDH) without classic sign lucid interval in children case series and literature review**

Abu Azhar¹, Zaenal Mustaqin², Yuriz Bakhtiar³, Dody Priambada³, Thohar Ariffin³, Happy Kurnia³, Ajid Risdianto⁴, Krisna Tsaniadi⁵

¹Department of Surgery, Faculty of Medicine, Universitas Diponegoro, Dr Kariadi General Hospital, Semarang, Indonesia
²Department of Neuro Surgery, Faculty of Medicine, Universitas Diponegoro, Dr Kariadi General Hospital, Semarang, Indonesia
³Department of Neurosurgery, Faculty of Medicine, Universitas Diponegoro, Dr Kariadi Central General Hospital, Medical Faculty of Universitas Diponegoro, Semarang, Indonesia
⁴Department of Anesthesiology, Faculty of Medicine, Universitas Diponegoro, Dr Kariadi Central General Hospital, Medical Faculty of Universitas Diponegoro, Semarang, Indonesia
⁵Department of Neurosurgery, Faculty of Medicine, Universitas Diponegoro, Dr Kariadi Central General Hospital, Medical Faculty of Universitas Diponegoro, Semarang, Indonesia

**Background:** Epidural hematoma (EDH) are bleeding in epidural space. Classically patients suffered from EDH experience a lucid interval which is a period of intact consciousness prior to deterioration. EDH cases in children have different clinical appearance when they are compared to adult cases.

**Case Presentation:** We reported two cases of epidural hematoma: first case involves the right front temporoparietal and the second one involves...
parietooccipital regions both without classic lucid interval sign. Hematoma evacuation craniotomy was indicated to reduce increased ICP (intra-cranial pressure). After craniotomy, patients were awake. They were discharged at D+3. The reasons of this condition are children have better elasticity of the skull bones, the fontanelle is still opened, their duramater is not tightly attached to the internal tabula. The water content of the brain parenchyma is larger and the subarachnoid space is rich of blood vessels. In addition, the density of the skull is thinner, the bones are more flexible, the dura adheres only to the coronary suture, and the source of bleeding is the diploic vein or dura.

**Conclusion:** The EDH without classic sign lucid interval in children have different clinical appearance when they are compared to adult cases and need to be managed appropriately.

**Keywords:** EDH, Classic Sign, Children, Case Series

### The relationship between stromal and epithelia ratio with LUTS level in benign prostate hyperplasia patient at Saiful Anwar General Hospital, Malang

**Basuki B Purnomo, Constantino Satriono**
Department of Surgery, Faculty of Medicine, Universitas Brawijaya, Malang, Indonesia

**Background:** BPH (Benign Prostatic Hyperplasia) is the most common disease in elderly man. Histopathological definition of BPH is increasing of stromal and epithelia of prostatic gland in periurethral area which is hyperplasia. International Prostate Symptom Score (IPSS) is an approved tool to assess the symptoms of LUTS from Benign Prostate Hyperplasia. IPSS questionnaire is a valid measurement for the severity of BPH disease in well-educated population. The purpose of this study was to determine the correlation between the ratio of the stromal and epithelial glands of the prostate gland with the LUTS levels in BPH patients.

**Method:** Sample obtained by random, results in 42 samples. Each sample had undergone transurethral resection and the resected tissues was processed into histopathological preparations which will be measured in stromal and epithelial area. From the study results obtained the smallest value of stromal and epithelial prostatic gland ratio was 2.01 which is not much different from normal prostate.

**Results:** A strong correlation between the ratio of the stromal and epithelium of prostate gland to the level of LUTS in patient with BPH (r: 0.859; p: 0.000). This study also showed that the higher ratio correlated with the higher IPSS score which depicted the patient’s level of LUTS.

**Conclusion:** There is a strong ratio between stromal cells and prostate epithelial cells with the IPSS value that indicates the degree of LUTS in BPH patients. The higher the ratio of cells and epithelial cells, the IPSS value will increase in BPH patients.

**Keywords:** Stromal, Epithelia, BPH, LUTS, IPSS

### The difference of CD4+ CD25+ FOXP3+ T cell regulators in benign prostate hyperplasia patients, prostate cancer, and control of healthy subjects in Dr. Saiful Anwar General Hospital

**Kurnia Penta Seputra1, Basuki Bambang Purnomo1, Fiki Aprilino Risenta1, Hani Susianti1, Harun Alrasyid1, Handono Kalim2, JDP Wisnubroto1, Hery Susilo1**

1Department of Urology, Medical Faculty of Universitas Brawijaya, Malang, Indonesia
2Department of Surgery, Medical Faculty of Universitas Brawijaya, Malang, Indonesia
3Department of Clinical Pathology, Medical Faculty of Universitas Brawijaya, Malang, Indonesia

**Abstract:**

The aim of this study was to compare the expression of CD4+ CD25+ FOXP3+ T cell regulators in benign prostate hyperplasia (BPH), prostate cancer, and healthy controls. Materials and Methods: A total of 150 patients were included in the study: 50 patients with BPH, 50 patients with prostate cancer, and 50 healthy controls. The expression of CD4+ CD25+ FOXP3+ T cells was detected using flow cytometry. Results: The expression of CD4+ CD25+ FOXP3+ T cells was significantly higher in prostate cancer compared to BPH and healthy controls. Conclusions: The expression of CD4+ CD25+ FOXP3+ T cells in prostate cancer patients was significantly higher compared to BPH and healthy controls. Future studies are needed to elucidate the role of these regulators in the progression of prostate cancer.

**Keywords:** CD4+ CD25+ FOXP3+, T cells, BPH, prostate cancer.
ABSTRACT


Differences in serum levels of TNF-α and degree of damage histopathology at contralateral testis in the Rat (Rattus novergicus-Wistar strain) experiencing orchidectomy and orchidopexy due to testicular torsion

Rizki Hanifan Nugraha 1, Besut Daryanto 2

1 General Surgeon Resident, Faculty of Medicine, Universitas Brawijaya, Malang, Indonesia
2 Department of Surgery, Faculty of Medicine, Universitas Brawijaya, Malang, Indonesia

Background: Testicular torsion is a urological growing urgency in the age of puberty and early adulthood period. Measures of treatment include surgical and orchidopexy bilateral distortion through access trans-scrotal, with orchidectomy which is indicated only for cases that unviable reperfusion after distortion, or necrosis. This study aimed to determine the differences in serum levels of TNF-α and the degree of damage to the contralateral test histopathology in mice with orchidectomy and orchidopexy due to testicular torsion.

Methods: Wistar rats were divided into four groups: negative control, testicular ischemia for 6 hours followed by orchidectomy.

Results: There were significant differences of TNF-α and degree of damage histopathology at contralateral testis in the group without orchidectomy for the control group and the orchidopexy group.

Conclusion: Testes that experience testicular torsion will affect contralateral testicular damage through increased serum TNF-α.

Keywords: TNF-α, Degree of Damage, Orchidectomy, Orchidopexy

Enterovesical fistula caused by indwelling urethral catheter

Florence Audina 1, Kezia Christy 1, Sugiharto Purnomo 2

1 General Practitioner, Faculty of Medicine and Health Science, Universitas Katolik Indonesia Atma Jaya, Jakarta, Indonesia
2 Division of Digestive Surgery, Department of General Surgery, Husada Hospital, Central Jakarta, Indonesia

Background: Enterovesical fistula (EVF) defines abnormal communication between the intestine and bladder. Foreign bodies, radiation, ischemia, infection, inflammation, epithelization of a tract, neoplasia, distal obstruction, and steroid use can promote fistula formation. Foreign body causing a fistula is considered rare thus this case report aims to present a rare case of ileovesical fistula caused by indwelling catheter. This case study aims to show a prospective evaluation on a single patient with enterovesical fistula.

Case Presentation: A 55-year-old schizophrenic man with abdominal distention was referred to a digestive surgeon. Six months prior to referral, the patient cut his urethral catheter and the remaining catheter was left in the bladder. The patient complained recurrent urinary tract infection ever since. Physical examination showed sign of peritonitis. Abdominal computed tomography confirmed perforation of bladder with the tip of catheter reached the bowel. Exploratory laparotomy revealed a perforated bladder and ileovesical fistula. The fistula was closed, the bladder was sutured, and an ileostomy was made. Histopathologic examination of the fistula showed chronic inflammation. Two months later, the stoma was closed and re-anastomosis was done. The patient recovered remarkably.

Conclusion: Foreign body can cause a perforation and promote a fistula formation. Enterovesical fistula considered as a complication of indwelling catheter. In some cases, peritonitis and septic shock may occur. In uncomplicated case, a conservative management can be done, however in presence of acute abdomen, surgical approach is preferably.

Keywords: Enterovesical Fistula, Indwelling Urethral Catheter
ABSTRACT

Abdominal wall endometriosis mimicking periappendicular mass: a case report

Aditya Rahman¹, Widya²
¹General Surgeon, Bukittinggi National Stroke Hospital, Bukittinggi, West Sumatera, Indonesia
²Radiologist Bukittinggi National Stroke Hospital, Bukittinggi, West Sumatera, Indonesia

Background: Abdominal wall endometriosis was a rare case which the incidence about 0.03%-1.5%. It could mimic as a periappendicular mass, as we found in our Department. This case study aims to evaluate further the abdominal wall endometriosis mimicking periappendicular mass.

Case Presentation: We documented a case of 29-year-old woman presented with recurrent-cyclical abdominal pain at right iliac area since 4 months ago that worsened over the last days. Physical examination revealed tender and relatively non-mobile mass located 3 cm lateral of the previous Pfannenstiel scar of caesarean surgery 18 months ago. Abdominal ultra-sound suggested the periappendicular mass. Under spinal anaesthesia, exploration by Lanz incision revealed 2.5 cm mass in the rectus muscle with adhesion of inflammatory-appendix. Appendectomy and en-bloc excision was performed. A 3 cm defect of abdominal wall was repaired by primary suture. Histopathologic study showed endometriosis at rectus muscle. Until three-months of follow-up there were not any symptom and residual mass.

Conclusion: Abdominal wall endometriosis was very rare case that should be included in differential-diagnosis at female patient that mimicking appendicitis. Wide excision was effective and sometimes required abdominal wall defect reconstruction.

Keywords: Endometriosis, Mimicking, Periappendicular Mass

Bladder extrophy in adult women

Angga Prawira Purwanto¹, Kadek Budi Santosa²
¹General Surgery Training Program Medical Faculty of Universitas Udayana, Sanglah General Hospital, Bali, Indonesia
²Department of Urologist Surgery, Medical Faculty of Universitas Udayana, Sanglah General Hospital, Bali, Indonesia

Background: Bladder extrophy is a condition in which the bladder is located outside the abdominal wall. This case is a rare congenital disease with an incidence of 2.7 per 100,000 births, and 500 times more often in children than adults. This condition is often accompanied by abnormalities in the pelvic bone, pelvic floor and genitalia. The embryological mechanism that associated with this condition is due to failure of the closure of the cloacal membrane in the mesoderm at the 4th week until the 5th of gestational age. The case of this malformation is life threatening so it is necessary to immediately perform reconstructive surgery with the aim to close the bladder and abdominal wall.

Case Presentation: A 19-year-old woman came to the Sanglah General Hospital after being referred from Sumba Hospital with the main complaint that she was unable to resist urinating. From birth, patients can’t control the urge to urinate so that from childhood, she always use diapers. This patient’s urine flow is smooth and without blood, no bowel complaints. The patient has a wound with an open mass from birth until present. On January 17, 2019, a supporting examination of Pelvic and Abdomen X-ray photographs was found, pubic diastasis with manta ray sign (+) supporting bladder extrophy, no visible fracture or dislocation of joints. Then performed an ultrasound urology there is chronic renal injury bilateral et causa pyelonephritis. As per the bladder extrophy, it is found that the bladder is not filled with urine. On December 9, 2019, Radical cystectomy ileal conduit was performed with appendicectomy, vaginal reconstruction, and closure of the defect with abdominal advancement with multiple Z-plasty. Patients were controlled at 3 weeks postoperatively and performed Splintography. The results showed no visible defect filling or additional shadow or tract fistula or contrast extravasation in the right ileal conduit and right ureter, There were no abnormalities in the kidneys and bilateral ureters, and pubic diastasis.

Conclusion: This case report is an interesting case considering the incidence of bladder extrophy is very rare, especially in adults. Management for cases of bladder extrophy is difficult in adult women in this case is with radical cystectomy ileal conduit with appendicectomy, vaginal reconstruction, closure of the defect with abdominal advancement and splintography.

Keywords: Abdominal Advancement, Bladder Exstrophy, Radical Cystectomy Ileal Conduit, Splintography

Anteriorly based pudendal thigh flap for scrotal reconstruction base on the Deep External Pudendal Artery (DEPA) in a patient with Fournier’s gangrene: a case report

Irawan Sukarno¹, Lukas Y², Astram A³
¹Resident at Faculty of Medicine, Universitas Sam Ratulangi, Prof. Dr. R. D. Kandou General Hospital, Manado, Indonesia
²Department of General Surgery, Mala General Hospital, Talaud, North Sulawesi, Indonesia
³Department of Urology Surgery, Faculty of Medicine, Universitas Sam Ratulangi, Prof. Dr. R. D. Kandou General Hospital, Manado, Indonesia

Background: Major scrotal skin loss represents a significant challenge for reconstructive surgeons. This case study aims to evaluate the anteriorly based pudendal thigh flap for scrotal reconstruction base on the Deep External Pudendal Artery (DEPA) in a patient with Fournier’s gangrene.

Case Presentation: A 43-year-old male presented to the emergency department with a complaint of scrotal pain and swelling. His symptoms had started seven days prior to presentation. The patient complained of associated fever. Vital signs included a blood pressure of 130/80 mmHg, a heart rate of 110 beats per minutes and a body temperature of 38.3°C. On physical examination, the patient had diffuse edema of the scrotum with areas of skin discoloration. Laboratory analysis revealed a white blood cell count of 26.7 K/μL. Based on the history, physical examination and these findings, a diagnosis of Fournier’s gangrene was made and patient was taken to the operating room for debridement of the scrotal and testicles. The patient returned to the operating room two subsequent times for further debridement prior to reconstruction with anteriorly based pudendal thigh flap. He was discharged approximately two months after presentation with an excellent prognosis.

Conclusion: The anteriorly based pudendal thigh flap for scrotal reconstruction base on the Deep External Pudendal Artery (DEPA) in a patient with Fournier’s gangrene provide a favourable outcome.

Keywords: Fournier’s Gangrene, Anteriorly Based Pudendal Thigh Flap
ABSTRACT

A case report: primary mucinous adenocarcinoma of the renal pelvis and ureter

Yusuf Alfi Mulia¹, I Wayan Yudiana²
¹Resident in General Surgery Department, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Denpasar, Indonesia
²Lecturer of General Surgery and Urology Department, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Denpasar, Indonesia

Background: Tumor of the renal pelvis is uncommon and generally included in upper tract urothelial carcinoma (UTUC), with a relative frequency 90% belong to transitional cell carcinoma, 10% squamous cell carcinoma, and only 1% adenocarcinoma. Primary mucinous adenocarcinoma is one of the adenocarcinoma subtypes and it is rarely found in the renal pelvis and ureter. This tumor often discovered accidentally after nephrectomy and usually has a poor prognosis.

Case Presentation: A male 55-years-old, came with initial assessment of left renal staghorn calculi, severe hydronephrosis and mild renal impairment. Primary left nephrectomy was done and the histopathological showed a mucinous adenocarcinoma subtypes of renal pelvis and ureter. Adjuvant chemotherapy with FOLFOX-4 regimen 4 cycles was given after one month after the operation. One year after treatment, the evaluation showed there was no any recidive mass.

Conclusion: Primary mucinous adenocarcinoma of the renal pelvis and ureter was a rare case, discovered accidentally after nephrectomy of staghorn calculi. Because this tumour has a poor prognosis, a multimodal treatment and approach are needed for better outcome.

Keywords: Mucinous Adenocarcinoma, Upper Tract Urothelial Carcinoma, Nephrectomy

Differences of electrolytes value in pre and post Percutaneous Nephrolithotomy (PCNL) in nephrolithiasis patients at H. Adam Malik Hospital Medan

M. Bob Muharly Rambe¹, Dhirajaya Dharma Kadar², Ramlan Nasution²
¹Department of Surgery, Adam Malik General Hospital, Medan, Indonesia
²Department of Surgery, Urology Division, Adam Malik General Hospital, Medan, Indonesia

Background: Percutaneous nephrolithotomy (PCNL) is the treatment of choice for kidney stones. In the PCNL procedure, artificial occlusion of the pelvic system was performed and irrigation was performed. Although the irrigation process is performed with isotonic fluids, the PCNL procedure carries a risk of intravascular absorption of fluid. Apart from affecting hemodynamic, this can affect the amount of electrolytes before and after PCNL. The purpose of this study was to determine the difference between serum electrolytes in the conditions before and after the Percutaneous Nephrolithotomy (PCNL) procedure.

Methods: This research is an analytical study with a cross-sectional design. Samples were taken using consecutive sampling technique according to the inclusion criteria in patients who had undergone Percutaneous Nephrolithotomy (PCNL) in Haji Adam Malik Hospital, Medan, as many as 47 people. Data were taken from February to June 2020.

Results: The sodium value before and after PCNL has a mean difference of 1.90, so that the p value>0.05, which means not statistically significant. It is also known that the value of potassium before and after PCNL has a mean difference of 0.47, so that the p value> 0.05, which means not statistically significant. The chloride value before and after PCNL had a mean difference of 0.45, so the p value>0.05, which means not statistically significant. It is also known that the value of potassium before and after PCNL has a mean difference of 0.47, so that the p value> 0.05, which means not statistically significant.

Conclusion: There is no difference between electrolyte levels before and after PCNL based on the duration of action.

Keywords: PCNL, Electrolytes, Nephrolithiasis

Early versus delayed surgical management of testicular torsion on patient’s outcome: an evidence-based case report

Angie Beatrice, Ocsyavina
Bhayangkara Brimob Hospital, Depok, West Java, Indonesia

Background: Testicular torsion is one of urological emergencies that require assessment and exploration immediately. Studies from around the world...
acknowledge that early identification and surgical management will prevent testicular atrophy and preserve its function, yet literature showed no sufficient evidence to support or refuse the prognosis, particularly in testis viability. This study aims to compare testis viability as an outcome related to early versus delayed surgical management in testicular torsion patients.

Methods: A comprehensive literature search was carried out on PUBMED®, ProQuest®, and Cochrane® databases. Appropriate keywords (testicular torsion or torsion testis and testis viability) were used. Studies then selected using implemented criteria, filters and in-depth screening were done accordingly.

Results: Three full articles were acquired. Two articles were cohort retrospective studies and one article was systematic review. All considered valid and applicable in the clinical setting. MacDonald C, et al divided groups into those presenting <6 hours and >6 hours from onset of symptoms and found orchidectomy rates to be 9 vs 56% respectively. Overholt T, et al. stated that time to surgery from symptom onset was significantly longer in those transferred (p = 0.02). The rate of orchidectomy was 11% higher in patients who transferred than in the patients who presented directly. Sanchez IC, et al. found the wait time in minutes from triage to surgery, those with orchidectomies did wait significantly longer for surgery than those with orchiopexies (p < 0.0001).

Conclusion: Onset of symptoms to triage and surgical intervention affect testis viability in three illustrative cases.

Keywords: Early Surgical, Delayed Surgical, Testicular Torsion Management, Patient's Outcome

Undescended testis with torsion: a rare case report

Indra Kusuma Adi Putranto¹, Sofyan Rais Addin², Nanda Daniswara², Dimas Sindhu Wibisono², Muhammad Adi Soedarso², Eriawan Agung Nugroho², H. Ardy Santosa²

¹Resident of General Surgery, Medical Faculty, Universitas Diponegoro, Dr. Kariadi Hospital, Semarang, Indonesia
²Division of Urology, Medical Faculty, Universitas Diponegoro, Dr Kariadi General Hospital, Semarang, Indonesia

Background: Undescended testis (UDT) is more prone to torsion, compared to normal testicle. Even though it is more frequent, the literature of torsion of undescended testicle is mostly limited to case reports, about less than 30% of all cases of Undescended testis. UDT with torsion can lead to testicular cancer and infertility. Physical examination and imaging studies are important to prevent misdiagnosis.

Case Report: A 9-month-old boy came to emergency room Dr. Kariadi Hospital with right inguinal pain, tenderness and swelling within 2 days of duration. On physical examination there was an inguinal swelling, tender mass in the right inguinal region and an empty ipsilateral hemiscrotum. From the abdominal sonography found the right and left tests are located in the inguinal region, and there is no vascularity on the right Tests

Conclusion: Patients with undescended testis with torsion are rarely found, but, with rapid diagnosis, affected testes can be salvaged. Physical examination and imaging studies as the key to diagnosis are important so that there is no misdiagnosis. Treatment should be done quickly to prevent testicular lost and further infertility in the future.

Keywords: Undescended Testis, Torsion Testis, Undescended Testis with Torsion

Neglected penile fracture

Muchamad Wisuda Riswanto¹, Ardy Santosa²

¹Resident of General Surgery, Faculty of Medicine, Universitas Diponegoro, Dr. Kariadi Hospital, Semarang, Indonesia
²Staff of Urology Surgery Subdivision, Faculty of Medicine, Universitas Diponegoro, Dr. Kariadi Hospital, Semarang, Indonesia

Background: Penile fracture is an emergency urologic surgery that can occur during sexual intercourse, sexual manipulation, accident, which affects the penis during an erectile condition which results in forced bending of the penis resulting in a torn tunica albuginea, and in severe conditions, can also cause tears or urethral rupture. This condition requires immediate surgical treatment, but sometimes treatment delays due to embarrassment.

Case Presentation: A 25-year-old male patient who complained of pain in his penis, with a history of 3 days before we examined, the patient masturbated and heard a “click” on his penis accompanied by feelings of pain. The patient’s clinical condition appeared mildly ill; on physical examination the penis did not reveal any abnormalities. We performed a caver sonographic examination with the results supporting the appearance of penile fracture. We decided penile exploration, found rupture of the tunica albuginea corpus cavernosum accompanied by hematoma, then we evacuated the hematoma and primary suturing on the tunica albuginea section that ruptured.

Conclusion: Immediate surgery is needed for cases like this. Patients should not postpone the examination and treatment, in order to eliminate pain, and maintain function.

Keywords: Tunica Albuginea, Corpus Cavernosum, Hematoma

Vaginal extrusion of ventriculoperitoneal shunt: case report

Rudi Haris munandar¹, Imam Hidayat², Dian Adi Syahputra³

¹Resident of surgery department, Universitas Syiah Kuala, Zainoel Abidin Hospital, Banda Aceh, Indonesia
²Neurosurgeon, Universitas Syiah Kuala, Zainoel Abidin Hospital, Banda Aceh, Indonesia
³Pediatric surgeon, Universitas Syiah Kuala, Zainoel Abidin Hospital, Banda Aceh, Indonesia

Background: Cerebrospinal fluid diversion such as ventriculoperitoneal shunt is one of the most common neurosurgical procedures worldwide. The most common problem of VP shunt was its complication. One of its rare complication is migration of distal catheter of peritoneal shut.

Case Presentation: A 3 years old female with hydrocephalus and history of VP shunt placement 3 months ago presented to Zainoel Sbidin hospital emergency room with shunt exposed from external genitalia. The patient had history of persistent watery vaginal discharge for 1 week and her mother found the catheter was extruded through her vagina in last 4 days, which was draining clear fluid. The patient had mild lower abdominal tenderness, no muscular rigidity and no sign of peritonitis. On external genitalia examination, there was catheter draining clear fluid extruded from introitus. During laparotomy, the peritoneal tube was covered by omentum and adhered to right ovariun. It coiled and entered right fallopian tube, uterus, cervix, and vagina. Patient
Penile strangulation

Anak Agung Bagus Angga Sudewa, Gede Suwedagatha
Department of Surgery, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Bali, Indonesia

**Background:** Penile strangulation is a rare emergency in the field of urology but requires immediate management to prevent penile morbidity. The case of penile strangulation was first reported by M. Gautier in 1755. Penile strangulation is a snare at the base of the penis that causes disruption of blood flow to the penis. This disruption in blood flow causes the penis to become ischemic and edema which if left unchecked will become necrosis. This bondage can be in the form of metal and non-metal objects and can occur in adults and children. Several penile strangulation management techniques have been used, namely by cutters, pliers, drills, and electric saws.

**Case Presentation:** An 18-year-old man came to the Emergency Room Sanglah Hospital Denpasar, complaining of a swollen penis after installing a ring lock on the base of the penis since 3 hours before coming to IRD. The patient inserts a key ring into the penis to look for sexual sensations. The patient also complained of pain in the lower abdomen and hypesthesia of his genitals. The patient does not experience dysuria. History of chronic illnesses or psychiatric illness or substance abuse is denied by the patient. From physical examination it appears that the lock ring traps at the base of the penis with a diameter of 3 cm, 5 mm thick and 1.5 cm wide, penile edema and palpation of hard penis. The patient was diagnosed with penile strangulation caused by trauma with ring lock and planned surgery to release strangulation.

**Conclusion:** This case report is an interesting case considering the number of penile strangulation events which are very rare but require prompt management to avoid complications.

**Keywords:** Penile Strangulation, Penile Trauma, Metal Ring

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**Mature mediastinal teratoma: a case report**

IGN Agung Indra Suharta\(^1\), Ketut Putu Yasa\(^2\)
\(^1\)Resident of General Surgery Department, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Denpasar, Indonesia
\(^2\)Cardiovascular and Thoracic Surgery Division, General Surgery Department, Faculty of Medicine, Universitas Udayana, Sanglah General Hospital, Denpasar, Indonesia

**Background:** Teratoma is the neoplasm that has more than one germinal tissue component. Teratoma mostly found in ovarium, testicle, retroperitoneal organ, sacrococcygeal region, and rarely found in mediastinum. This case study aims to evaluate further the mature mediastinal teratoma.

**Case Presentation:** We present 15-years-old women with chief complaint is chest pain in the right hemithorax with chronic cough. The working diagnosis had been made with thorax X-Ray and also Thorax CT scan with contrast study. The patient underwent thoracotomy and total tumour resection. Definitive diagnosis has been made after Histopathological examination. In our case, total tumour resection is a therapeutic choice for mediastinal teratomas because of possible complications that can arise due to suppression of cardiopulmonary organs or changes in traits towards a malignancy. Tumour resection also helps establish a diagnosis histopathologically. Mediastinal teratomas are usually not fatal, but complications due to extensive surgical procedures (e.g. pneumonectomy) can cause death.

**Conclusion:** Teratoma is one of the rare tumour that happened in mediastinum. usually it grows slowly and mostly asymptomatic. The management of this case is a total resection of the tumour. The Prognosis is relatively worse in adult compare to pediatric patient.

**Keywords:** Mediastinal Teratoma, Mediastinal Tumour

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**Foreign body extraction and wedge excision in patient with corpus alienum in the left hemithorax**

Artono Isharanto\(^1\), Koernia Kusuma Wardhana\(^1\), Alfonso Mario Eri S.D\(^2\)
\(^1\)Department of Thoracic, Cardiac, and Vascular Surgery, Faculty of Medicine, Universitas Brawijaya, dr. Saiful Anwar General Hospital, Malang, Indonesia
\(^2\)Resident of Department of Surgery, Faculty of Medicine, Universitas Brawijaya, dr. Saiful Anwar General Hospital, Malang, Indonesia

**Background:** Surgical intervention with lung resection after penetration trauma are rare. We report a 33-years-old male presented with penetrating trauma on the back and its management.

**Case Presentation:** Male, 33 years old, presented in emergency ward with complaint of pain on the back. He had alert consciousness. Physical examination showed an iron nail embedded in the back region with stable hemodynamic. Chest computed tomography showed foreign body with metal density penetrating the posterior side of thoracic cage, left region of visceral and parietal pleura, segment 10 of left lung parenchyma, and left...

ABSTRACT

Pulmonary contusion and compression fracture vertebrae T12 level also reported. We performed foreign body extraction and wedge excision of infero-posterior lobe of left lung. The infero-posterior lobe of left lung was wedge excised around penetration site. The mortality rate and pulmonary complications of wedge excision shown better result than lobectomy or pneumectomy.

Conclusion: Injury that penetrates the lung may be associated with damage to the intrathoracic structures. The diagnosis can be obtained from patient history, physical examination and imaging modalities such as chest X-ray and computed tomography scan. Foreign bodies can be removed from the pleura and chest wall by thoracotomy or video thoracoscopy.

Keywords: Foreign Body, Wedge Excision, Penetrating Trauma

Aortic cross clamp time and cardiopulmonary bypass time as prognostic factor of postoperative morbidity after mitral valve replacement surgery

Pajar Sigit Nugroho1, Hafizhuddin Adiwibowo1, Herpringga Lara Sakti1, Supomo2

1General Surgery Residency Program of Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia
2Cardiothoracic Surgeon and Senior Consultant of Universitas Gadjah Mada, Dr. Sardjito Hospital, Yogyakarta, Indonesia

Background: The aim of this study is to obtain Safety and Risk Margin of Aortic Cross Clamp (AOX) and Cardiopulmonary Bypass (CPB) Time in Mitral Valve Replacement (MVR) Surgery.

Methods: A cohort retrospective study was done to 70 MVR surgery patients in Dr. Sardjito Hospital from January 2016 to December 2018. The cut-off for AOX and CPB time was determined based on ROC curve using Youden index to obtain safety time (< cut-off point) and risk time (≥ cut-off point). The association between safety and risk margin from AOX and CPB time with postoperative morbidity was stated in p value, RR and 95% CI using chi-square method.

Results: There were 36 MVR surgery patients with cut-off AOX time 60.5 minutes (AUC:0.79) and CPB time 95.5 minutes (AUC:0.68), 22 MVR surgery patients combined with Devega Annuloplasty with cut-off AOX time 100.5 minutes (AUC:0.91) and CPB time 108.3 minutes (AUC:0.91), 12 MVR surgery patients combined with vegetative evacuation and/or Left Atrial Thrombus with cut-off AOX time 77 minutes (AUC:0.69) and CPB time 96.3 minutes (AUC:0.66). AOX risk time present for each surgery, 70.6% evoked morbidity with p=0.001, RR=6, CI 95% (2.46-16.41). CPB risk time present for each surgery, 76.9% evoked morbidity with p=0.001, RR=4, CI 95% (2.18-8.19).

Conclusion: AOX and CPB time are significantly correlated in evoking morbidity post MVR surgery. Further validation regarding safety and risk margin of AOX and CPB time with more samples need to be done.

Keywords: MVR, AOX time, CPB time, Prognostic, Morbidity