Foreword

Assalamu’alaikum Wr. Wb

Praise and gratitude we pray the presence of Allah SWT for all His mercy and guidance we can still work and work to help in the field of education and humanity. With our greetings and prayers, we are praised to the Holy Prophet Rahmatan lil alamin Rasulullah Muhammad SAW who has brought us from the realm of darkness to a world full of knowledge.

In its third year, the 2019 Aceh Surgery Update will be held in conjunction with The 1st Indonesian General Surgeon Society (PABI), Aceh Chapter Meeting and The 1st Unsyiah Surgical Alumni Association (IABU) Annual Meeting, on December 06th – 08th December 2019 at Dr. Zainoel Abidin Hospital and Building D Multipurpose Auditorium F-MIPA Universitas Syiah Kuala Banda Aceh, with the theme of Tips and Traps in Emergency Surgical Daily Practice. The scientific program this time was very special with the presence of the Bali Medical Journal indexed by Web of Science in scientific publications for all topics presented, both in symposium sessions and free papers.

I would like to welcome all the experts who have been willing to attend to be the resource persons at this scientific event. A big thank you to all the committees and sponsors who helped to make this big activity a great success. Finally, I also welcome to all delegates, I hope you all get a high valuable scientific experience in the Banda Aceh, the City of Gemilang.

Wassalam,
Sincerely yours,

Yopie Afriandi Habibie, MD, SpBTKV-E, FIHA, FICS, FACS
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Abdominal pain in children; medical vs surgical

Muntadhar Muhammad Isa
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Acute abdominal pain accounts for about 8% of the total children visiting the emergency department. Although it is a common symptom that is seen in children, it is not uncommon for it to be a manifestation of a serious surgical emergency. In recent years acute abdominal pain in pediatric patients has become a challenge for service providers, due to nonspecific symptoms and difficulty in assessment and examination physical in children. At present acute abdominal pain may be one manifestation of an urgent medical or surgical condition, where the biggest challenge is in making the right diagnosis so that proper treatment can be given thereby reducing the incidence of morbidity. No exact numbers are available, but between 7% and 10% of emergency department visits are for abdominal pain. Disease Control and Prevention Centre (CDC) obtained data from Ambulatory care survey National Hospitals from 1999 to 2008 there were 13.5% emergency abdominal pain and one-third non-specific abdominal pain, and 30% suffer from acute renal colic. The initial goal in evaluating acute abdominal pain that is important and achievable is to differentiate surgical and non-surgical conditions with each of them further categorized as urgent versus non-urgent. This can often be achieved by history taking, a thorough physical examination and supporting examinations especially to assess comorbidity. Decision making and management must also involve collaboration between medical emergency workers, surgeons, paediatricians and radiologists. Management of acute abdominal pain includes two ways are with medication or surgery. Providing treatment such as early analgesia to patients with acute abdominal pain in the emergency department will reduce patient discomfort without disrupting diagnostic accuracy that is clinically important and recommended based on several prospective randomized trials. However, the impact on diagnostic accuracy depends on the dose, type of application and cause of acute abdominal pain. There is a significant difference between the current knowledge of the literature and the routine practice of providing analgesia because surveys show that less than 50% of pediatric emergency physicians and pediatric surgeons are usually willing to provide analgesia before a definitive diagnosis.

Keywords: abdominal pain, acute abdomen, children

Constipation: challenging diagnosis and treatment in children

Dian Adi Syahputra
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Constipation is defined as delay or difficulty in defecation that persists for longer than two weeks and almost always functional without an organic aetiology in children. Functional constipation is a common problem worldwide and accounts for high healthcare usage and costs. The pathophysiology remains unclear but is probably multifactorial, behaviour is most likely to be important factor in children. Diagnosis and treatment primarily consist of a complete medical history and physical examination, additional investigations are not necessary in most cases. In a small percentage of children, organic constipation such as Hirschsprung disease, a spinal cord abnormality, or a metabolic disorder, an appropriate laboratory investigation and imagine studying is useful for diagnosis. Non-pharmacological (toilet training, defecation diary and counselling families) and pharmacological treatments are success for most functional constipation. Polyethylene glycol has become the first choice of therapy, although other options, such as other osmotic or stimulant laxatives are available.

Keywords: functional constipation, healthcare problems, appropriate investigation and treatments.

Congenital anomaly emergency cases: what should we do in rural areas

Djeni Bijantoro
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Neonatal intestinal obstruction is the most common paediatric surgical emergencies in neonates, usually caused by mechanical obstruction, from the luminal or extraluminal. Important clinical manifestation is vomitus, abdominal distention and impaired bowel movement. Rapid and accurate diagnosis, also early treatment will affect prognosis and morbidity and mortality rate. Neonates condition before and during referral to secondary or tertiary health care must be in stable condition and monitored regularly. Management of neonates emergency case requires multiple disciplinary medical science field as a comprehensive team, since congenital anomalies usually found in multiple organs. Early management at peripheral health care before and during referral is an important factor for outcome of neonatal obstruction.

Keywords: neonatal intestinal obstruction, congenital anomaly, early treatment, referral system/
ABSTRACT

Nightmare in the operating room; how to save life in limited resources facility, what should we learn from expert? injuries of thoracic cavity

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Emergency surgery is sometimes needed for thoracic injury, in which surgeons will be challenged to perform surgery of lung tissue, heart and great vessel. Problems arise as there is not enough surgical instruments or resources to do the surgery. Simplified surgical technique is used to cope the emergency situation. Various surgical instrument which does not belong directly for thoracic surgery, can be utilised and utilised in thoracic surgical interventions. Wound trauma requiring urgent thoracic surgery may include any of the following problems: massive hemotherox, a large clotted hemotherox, massive air leak, oesophagal injury, tracheal injury, cardiac (heart) injury, proven damage to blood vessels in the heart, or chest wall defect. Penetrating chest injury is common and most patients can be managed without formal thoracic surgical intervention. More than 90% of thoracic projectile injuries can be treated by the insertion of a chest drain only. Bleeding from the parenchyma of the lung in wounds of the thorax may be massive, but is slow and seldom requires hemostomias. Bleeding from the parenchyma of the lung in wounds of the thorax may be massive, but is slow and seldom requires hemostomias. But free bleeding from the heart, great vessels, internal mammary or intercostal arteries is fast and profuse. With a major haemothorax, autotransfusion should be considered without equipment of a cell-saver unit. Although Thoraco-abdominal injuries are common, if both thoracic and abdominal explorations are necessary, separate incisions should be made when possible. However, the patients who do merit surgical intervention in limited resources have a relatively high mortality and a rapid and practiced operative approach is required to achieve acceptable results.

Keywords: emergency surgery, thoracic surgery, war surgery.

Snakebites cases neglected in Indonesia

Tri Maharani
Indonesian World Health Organization (WHO) Advisor for snakebites

Snakebites cases are neglected diseases in Indonesia. No data in WHO but this research give data 135,000 cases/years. Most cases in Java especially East Java, Center of Java, Jogjakarta, West Java, Banten, and Jakarta. For Kalimantan, most cases in West Kalimantan and Center Kalimantan. After that followed by Sumatera, Sulawesi, Nusa Tenggara, Bali and Papua. No data on small island were recorded. Mortality is 4% per years. King cobra bites gave most death. Morbidity about 80% cases, its complicated problem and difficult problem. Many programs to reducing snakebites problem with department of health Indonesia including data collecting, skill update and knowledge specialist, physicians and nurses about antivenom in all big hospital and first aid equipment in mini-hospital, followed by communication medic system (EMS toxicology) for helping emergency cases of snakebites. Data analysed from snakebites forms of WHO in 2012 until 2018 for every cases consulted to RECS Indonesia. Incidence, mortality, disability were very high and it needs intervention from medical team and government. Networking, data collecting, training, education community and medical team, guideline first aid and treatment, standard form management snakebites in emergency department is essential to help medical team reduction snakebites cases.

Keywords: snakebites, RECS, WHO guideline, reduction

Spine injury, how to recognize and stabilize patient in golden hours periods

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The accuracy, adequacy, speed of first aid management, diagnosis, and treatment within the first few hours of injury will determine the outcome of a spinal cord injury. Efforts to improve prevention on spinal cord injury have little success so far and it remains a threat to life and its quality for the survivor. There has been major improvement in our understanding of the physiology involved and subsequently our decision making for management of spinal cord injury. However, we still lack evidence to improve the quality of care for spinal cord injury patients. One of the most challenging tasks in trauma care is management of patient with acute spinal cord injury. Within the first few days of the injury, every health professionals will prioritize life-saving interventions. When done correctly, these interventions will prevent secondary complications. Some complication such as venous thromboembolism might surface and subside on the acute period, while pressure ulcers sometimes accompanied with respiratory and urological complication might last longer and presents as a long-term concern. Preventive measures taken to address the secondary complications will have a lifelong benefit for the patient. Also, patients with spinal cord injury will demand immense psychological support as it will affect both the patient and their family. It is advised to begin assessment of the psychosocial needs of the patient as soon as possible and begin the support immediately.

Keywords: spine injury, recognise, stabilize, golden hours management.

Early management in burn injury

Muhammad Jailani
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Burn injury is difficult to overcome in a short time. It’s also challenging to predict the depth of the injury and of course significant costs are required for its treatment. It needs sufficient knowledge for handling the initial stages when heat exposes the body. The heat will cause burns to the body and this will have an impact on tissue damage, whether local, superficial, deep, or systemic. The longer the heat in contact with the body, the higher the damage caused. Fire burns will injure the body from superficial to deep and can result in systemic abnormalities. Electric burns will have an impact on damage to all body tissues including the heart and brain. Chemical burns can injure the entire affected body and attached chemicals have long-lasting damage in the tissues.

Keywords: burns, right initial treatment, suppress morbidity, cost-effective.
Minimally invasive surgical approaches have become increasingly feasible, efficient and popular for the management of a wide range of spinal disorders, with a growing body of research demonstrating numerous advantages of these techniques over the traditional open approach developed during the last decade. Efforts to decrease muscle crush injuries during prolonged retraction, avoid significant soft tissue stripping and minimize bony resection are surgical principles that are employed to prevent iatrogenic instability and provide patients with decreased postoperative pain and disability. Minimally invasive spine surgery (MISS) is an alternative to traditional open surgical procedures performed to treat different spinal disorders, such as degenerative disc disease, herniated disc, scoliosis, and spinal stenosis. There has been a growing body of literature that not only confirms the efficacy of these procedures but also underscores the advantages these procedures offer concerning less morbidity and safer complication profiles. Furthermore, endoscopic interbody fusion has also been utilized in the lumbar spine as technology continues to advance. As technological innovation continues to facilitate reproducible surgical technique and expand the indications for use, we believe that endoscopic spine surgical techniques will provide surgeons with a more powerful and less morbid approach to spinal pathology that ultimately elevates the standard of care when treating our patients. We present a brief review of the history of endoscopic spine surgery, an overview of current techniques and review current outcomes of endoscopic spine surgical procedures in the context of an invasiveness/complexity index to elucidate the benefit zone of these newer techniques. Keywords: endoscopic spine surgery, minimally invasive spine surgery, invasiveness index.

Injuries of the knee ligaments are common, particularly in sporting pursuits but also in road accidents, where they may be associated with fractures or dislocations. They vary in severity from a simple sprain to complete rupture. It is essential to recognize that these injuries are seldom ‘unidirectional’; they often involve more than one structure. The number of anterior cruciate ligament (ACL) injuries reported in athletes younger than 18 years has increased over the past two decades. Reasons for the increasing ACL injury rate include the growing number of children and adolescents participating in organized sports, intensive sports training at an earlier age, and greater rate of diagnosis because of increased awareness and greater use of advanced medical imaging. ACL injuries often require surgery and/or many months of rehabilitation and substantial time lost from school and sports participation. Unfortunately, regardless of treatment, athletes with ACL injuries are up to 10 times more likely to develop degenerative arthritis of the knee. Most cases of ACL knee surgery are carried out arthroscopically these days. Keywords: anterior cruciate ligament injury, ligament injury, hamstring tendon, patellar tendon.

A multiple trauma patient has multiple injuries or involvement of more than one body system. This kind of trauma carries a high incidence of morbidity and mortality. Rapid assessment to identify immediately life-threatening injuries, manage any life threats since patient in pre-hospital phase and rapid transport are essentials to his/her survival. However, ambulance has evolved from simple transport vehicle into mobile patient care areas where lifesaving maneuvers can be performed. Secondary survey and further stabilization will be performed in ambulance. With a good staffing, standardize equipment and medication, and also good communication between EMS with appropriate receiving facilities, a safe transport for patient can be done and hopefully will reduce the morbidity and mortality rate. Keywords: multiple trauma, pre-hospital, ambulance, transport.

The management of open fractures remains a formidable challenge for orthopaedic surgeons. Generally, the principles of surgical treatment for open fracture management are debridement and lavage of the open wound combined with fracture stabilisation, soft tissue reconstruction with Healthy soft tissue closure. This treatment aims to manage the overall injury and specifically prevent primary contamination becoming infection. Despite the improvements in technology and surgical techniques, rates of infection and nonunion remain an important issue. Early stabilization of open fractures provides many benefits to the injured patient. The surgeon has many choices when deciding on fixation constructs either by using internal or external fixation. The choice of fixation involves the type of fractured, the fracture location, the extent of the soft-tissue injury and the degree of contamination, and the physiologic status of the patient. Keywords: open fractures, debridement, internal fixation, external fixation, bone reconstruction.

Urinary retention is an impaired ability to micturate due either to a mechanical
or functional obstruction of the lower urinary tract. It is a common urological problem, often seen in men than women by a ratio of 10:1. In the vast majority of cases, acute urinary retention (AUR) in men appears related to the natural history of prostate enlargement, require diagnostic imaging such as simple pressure voiding studies, transabdominal ultrasonography, endoscopic visualisation and video urodynamic studies. However, not all health facilities provided with complete diagnostic modalities. There is high variability within and among countries in its management, which can be explained not only by differences in access to care but also by a lack of harmonisation and consensus on the best way to proceed. First-line treatment of AUR usually involves decompression of the bladder by catheterisation, which can be followed by a trial without catheter (TWOC) or immediate surgery. Suprapubic catheter offers several advantages not often exploited by urologists. Elective surgery after TWOC is preferred to immediate surgery because it is associated with a lower morbidity and mortality risk. Treatment with a1fa-adrenoceptor blocker can increase the success rate of a TWOC.

**Keywords**: urinary retention, management, rural area.

**Update in management for benign prostate: surgery or watchful waiting**

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Benign Prostatic Hyperplasia (BPH) is a histologic diagnosis among the majority of ageing male population. The prevalence of BPH increased with age and characterised by proliferation of glandular epithelial tissue, smooth muscle, and connective tissue causing the increase of tissue mass in the transition zone of the prostate. The diagnosis of BPH can be made based on the correct history taking and several examinations related to the condition. Nowadays, when a minimal invasive surgical technique in urology has been developed, the treatment of prostatic enlargement for BPH remains controversial and becomes more variable. In general, treatment options for men with BPH start at watchful waiting and progress through medical to surgical interventions. Watchful waiting is recommended by both the American Urology Association (AUA) and the European Association of Urology (EAU) for patients with minimal impairment in quality of life. Watchful waiting is inappropriate for patients with complications of bladder outlet obstruction related to BPH. In surgical management of BPH, evaluation and preoperative testing are needed. Surgical management of BPH is recommended for patients who have renal insufficiency secondary to BPH, refractory urinary retention secondary to BPH, recurrent urinary tract infections, recurrent bladder stones or gross hematuria due to BPH, and/or with lower urinary tract symptoms (LUTS)/BPH refractory to and/or unwilling to use other therapies.

**Keywords**: benign prostate hyperplasia, watchful waiting, surgical, management.

**Management update in urinary tract infection**

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Urinary tract infection (UTI) is inflammation response due to bacterial invasion on urinary tract manifesting bacteriuria and pyuria. Bacteriuria is manifestation of 10⁶ colony-forming unit (CFU)/ml in urine. Pyuria is manifestation of leukocyte in urine (5/mm³). Predisposition factors included urinary tract stone, obstruction, diabetes Mellitus, sexual intercourse, pregnancy, instrumentation/ catheterization, and immunosuppression. It could be classified as upper UTI, lower UTI, simple UTI, and complicated UTI. Most common pathogen is Escheriaceae coli, followed by Klebsiella sp, Proteus sp, Enterobacter, and Staphylococcus saprophytics. Manifestation of UTI included asymptomatic bacteriuria, urethritis, prostatitis, epididymitis, orchitis, cystitis, and pyelonephritis. Gold standard of diagnosis in UTI is urine culture. Management of UTI included fluid intake, antibiotic, urine alkalization. In lower UTI, most of patients need hospitalisation. Intravenous antibiotic administration should be considered for 5-10 days if unresponsive. In upper UTI, most of patients need hospitalisation. Intravenous antibiotic administration should be considered for 48 hours. Infectious Disease Society of America recommended fluoroquinolones, aminoglycosides, and broad-spectrum cephalosporins for initial management. Antibiotic administration for 7-21 days depends on infection severity.

**Keywords**: Urinary tract infection, UTI, bacteriuria, pyuria, management.

**When to decide surgical bleeding control; should we wait for further examination**

**Suhardi**

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Bleeding is a one of the cases that are often found in the surgical department. Most of the cases are found in traumatic patients that been brought emergency room, even also found in intraoperative and post-operative patients. One of the most important things is to recognize the bleeding in order to prevent delayed treatment. The treatment emphasize into controlling and stop the bleeding, so that some of the unnecessary examinations can be delayed to precede definitive treatment. It is important to know the right time to take definitive surgical treatment to prevent excessive resuscitation. Excessive resuscitation often leads into traumatic coagulopathy that worsen the patient outcome. The treatment management should be done simultaneously and based on teamwork.

**Keywords**: bleeding, classification, treatment.
Limb ischemia, salvation or amputation? how I do it

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Critical limb-threatening ischemia (CLTI) is a clinical syndrome, most advanced form of peripheral arterial disease (PAD) of ischemic rest pain or tissue loss, non-healing ulcers or gangrene, related to PAD. CLTI has been characterized as a “pathway to amputation” and cardiovascular events. Treatments for CLTI include medications, endovascular therapies, and arterial surgery, with amputation considered the last recourse. However, non-invasive or invasive angiography help determine the feasibility and approach to arterial revascularisation. Revascularisation is the cornerstone of limb preservation in CLTI, and has traditionally been accomplished with open surgical vein bypass. An “endovascular-first” approach is often advocated based on a lower procedural risk. However, specific patterns of disease may be best treated by open surgical revascularisation. Despite this, in my clinical practice, available data suggest that the expected outcomes for both endovascular and open surgery in CLTI are strongly dependent on definable patient factors such as anatomic distribution of disease, vein quality, and comorbidities. Optimal patient selection is paramount for maximising benefit with each technique. This review summarises some of the existing data and suggests a selective approach to revascularisation in CLTI, which continues to rely on vein bypass surgery as a primary option in appropriately selected patients. Hybrid surgical techniques such as common femoral endarterectomy are commonly used to reduce operative risk. Lower extremity bypass grafting is most successful with a good quality, long, single segment autogenous vein of at least 3.5 mm diameter. Minor amputations are often required for tissue loss as part of the treatment strategy. But for a quarter of all newly diagnosed CLTI patients, above or below the knee amputation takes place within one year, coupled with the increased risk of amputation recurrence. Medical therapy after revascularisation targets risk factors for atherosclerosis and assesses wound healing and new or recurrent flow-limiting disease. Keywords: critical limb-threatening ischemia, limb amputation, endovascular therapies, open surgical bypass, revascularisation, limb salvage.

Gangrene diabetic: how to manage?

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Diabetes mellitus is a metabolic disorder that has macrovascular and microvascular complications, one of which is gangrene diabetic. World Health Organization (WHO) states that 415 million people affected by diabetes will continue to increase to 642 million in 2040 and in Indonesia 15% of people with diabetes mellitus become gangrene diabetic. Diabetic foot ulcer or diabetic gangrene is caused by neuropathy, and ischemic peripheral blood vessels caused by abnormalities of endothelial and vascular smooth muscle cells. Classification of diabetic gangrene can be followed from International Working Group on the Diabetic Foot (IWGDF) to assess the severity of diabetic gangrene based on the extent of the wound, ischemia and infection. Examination of diabetic gangrene such as Ankle Brachial Index (ABI), Duplex Ultrasound (DUS) Computed Tomography Angiography (CTA) and Magnetic Resonance Angiography (MRA) can help in the treatment of gangrene diabetic based on anatomy and the level of blood vessel obstruction. The principle of management of diabetic gangrene is treatment of infection and vascularization of the gangrene area. Revascularization is the main therapy, but with occlusion or including severe damage to limb tissue and amputation infection is a treatment that must be done to save lives because of sepsis and toxoaemia. Keyword: gangrene, diabetic, amputation, vascular.

Emergency in urology: surgical aspects

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Emergencies in urology are relatively few compared to other surgical fields. Emergencies in urology are rarely life-threatening. Any physician caring for patients must be able to rapidly recognize, diagnose, and treat urologic emergencies. Failure to recognize true urologic emergencies may result in renal failure, organ damage, or loss of sexual function. Often the diagnosis is obvious and the course of treatment self-evident. Other situations may be more subtle and the optimal treatment less obvious. Given the nature of urologic problems, patients may delay treatment or may present in a very urgent fashion. Acute urinary retention (AUR) is the most common urologic emergency, and presents as a sudden, complete inability to void. It is typically associated with considerable suprapubic and lower abdominal discomfort and can cause significant distress for the affected individual. The most concerning conditions are urosepsis in pyonephrosis, urogenital trauma, and other emergencies are torsion of the testicle, and priapism. In cases of surgery in severely urosepsis patients, there are important considerations before acting: (1) Is the patient well enough to undergo an operation?, (2) Will an operation improve the situation?, (3) Have you considered possible concomitant pathology or injuries?, (4) Should you involve other specialist(s) such as internist, or intensivist in the patient’s care?, (5) Would additional imaging be helpful? Keywords: Urologic emergencies, organ damage, urosepsi.

Orthopaedic injury and their treatment in earthquake

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Orthopaedic problems are common cases in earthquake. Bone fracture was the most common medical cases in disaster zone followed with another medical casualty just like head injury, thoracic injury or abdominal injury. Management of fracture in an earthquake zone usually could not followed principal rules of fracture management caused by destroyed and limited facility and resources. Fracture management consists of 4 principal rules (recognize, reduction, retention, and rehabilitation). Most common methods used were external retention, and rehabilitation). Most common methods used were external
ABSTRACT

Intra Abdominal Infection (IAI) in abdominal trauma patients constitutes one of the most frequent infectious problems and poses a major challenge to trauma surgeons. During the past three decades, there has been a significant shift from operative to selective non-operative management of the injured abdominal trauma patient. Collected review of patients with penetrating and blunt abdominal trauma, found the incidence of unnecessary exploratory laparotomy (UNEL) to be approximately 20%. On the other side, UNEL is associated with significant morbidity, mortality and cost. Identifying the risk factor associated with development of this IAI and its complications, and estimating their respective magnitudes. Secondly, to identify how effective the selective non-operative management by doing the tightly observation and re-evaluation will minimize the incidence of UNEL. Literature studies and multicenter reviews found many aspects related to abdominal trauma patients which were influenced to incidence of IAI and its impact to morbidity and mortality rate. The development of IAI in abdominal trauma patients who undergo early operation is a complex phenomenon resulting from multiple risk factors encountered during the preoperative, intraoperative, and postoperative period. In preventing the risk of IAI incidence in abdominal trauma patients, the rapid and appropriate initial management based on ABC’s concept, should initiate on the scene of the accident. The understanding of mechanism of injury, will help trauma surgeon to detect of abdominal injury by clinical examination, doing the appropriate and necessary investigation, will improve diagnosis and allow either early surgical intervention or facilitate conservative management. The experienced trauma surgeon will analyzed all the facts at the time patients arrived and decision will be undertaken, early laparotomy or conservative treatment with tightly observation and re-evaluation. Early detection and timely therapeutic intervention with selective early laparotomy can improve the prognosis and overall clinical outcome of abdominal trauma patients. The study confirmed the previous findings of an association between the UNEL and the development of IAI in abdominal trauma patients and its impact to the length of the hospital stay, morbidity and mortality rate, and cost.

Keywords: abdominal trauma, intraabdominal sepsis, early laparotomy, outcome.

Quality differences between single incision laparoscopy surgery and three port conventional laparoscopy in Dr. Zainoel Abidin General Hospital Banda Aceh, Indonesia

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Background: Laparoscopic cholecystectomy is a standard management to remove gallstones surgically. Many changes and improvement have been made until now in the technique of cholecystectomy. The number of ports is considered to be one of the factors affecting the quality of a laparoscopic cholecystectomy.

Methods: An observational analytic with consecutive sampling technique was performed in 44 cholelithiasis patients, laparoscopic cholecystectomy then single blinded divided into 2 groups: SILS group (n = 22 patients) and TPCL group (n = 22 patients). Each group are evaluated for wound size, operative time, postoperative pain score and length of hospital stay.

Results: There were differences of wound size each group (p = 0.001, SILS vs TPCL, median 30.00 mm vs 40.00 mm, min-max 25-50 vs. 20-55). There were differences in operative time (p = 0.014, SILS vs TPCL, mean ± SD, 67.5 ± 14.7 min vs 56.3 ± 16.04 min). There are differences in postoperative pain score (p = 0.000, SILS vs TPCL, median 2 vs 4, min-max 2-3 vs 3-4). There were differences in length of hospital stay (p = 0.000, SILS vs TPCL, median 2 days vs 3 days, min-max 2-3 vs 2-5).

Conclusions: Based on the results in this study, SILS was better by smaller wound size, lower postoperative pain score and shorter of hospital stay than TPCL, while TPCL operative time was shorter than SILS.

Keywords: laparoscopic cholecystectomy, SILS, TPCL, operative time, postoperative pain, length of hospital stay.

Current laparoscopic procedure in acute cholecystitis, when to do in emergency setting, when in elective procedure

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Diagnostic and therapeutic strategies for acute biliary inflammation/infection (acute cholangitis and acute cholecystitis), according to severity grade, have not yet been established in the world. The Tokyo Guidelines for the management of acute cholangitis and cholecystitis were published in 2007 (TG07). For patients with acute cholangitis of any grade of severity, treatment for the underlying etiology, including endoscopic, percutaneous, or surgical treatment should be performed after the patient’s general condition has improved. For patients with mild (grade I) cholecystitis, early laparoscopic cholecystectomy (LC) is the preferred treatment. For patients with moderate (grade II) acute cholecystitis, early laparoscopic or open cholecystectomy is preferred. In patients with extensive local inflammation, elective cholecystectomy is recommended after initial management with percutaneous gall bladder drainage and/or fixation. The technique is simple and universal for open or closed fracture. It could be followed by osteosynthesis or not. It also could be temporary or definitive treatment.

Keywords: disaster, earthquake, fracture, external fixation.
Burr holes exploration, it still the current procedure for head injury management in rural area

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In head injury patients, exploratory Burr Holes is still usual procedure that used in rural area without CT Scan with some indication. Burr Holes are primarily a diagnostic tool, as bleeding cannot be controlled and most acute hematomas are too congealed to be removed through a burr holes. However, if burr hole is positive, it is possible that modest decompression may be performed, and then the definitive craniotomy can be undertaken to incorporate the burr holes. This procedure is very emergency and performed in the threatening cases in head injury with clear indication. Clinical criteria based on deteriorating neurological exam. Patient of rapid transtentorial herniation of brainstem compression that does not improve or stabilize with mannitol and hyperventilation. Indicators of transtentorial herniation or brainstem compression are sudden drop in Glasgow Coma Scale (GCS) score even with lucid interval one pupil fixed and dilated, paralysis or deceleration (usually contralateral to blown pupil). Clear lucid interval usually correlated with epidural hematomas case especially in young patients. Other criteria, some patient needing emergent surgery for systemic injury (e.g. positive peritoneal lavage with hemodynamic instability) where there is no tome for performed brain CT Scan. Based on literature in 100 head injury patients undergoing transtentorial herniation or brainstem compression, exploratory burr holes were positive in 56%. With widespread availability of quickly accessible CT Scanning, exploratory burr holes are infrequently indicated.

Keywords: burr holes exploration, head injury, rural area.

Percutaneous epidural adhesiolysis: new alternative treatment of low back pain in lumbosacral herniated intervertebral disc

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Low back and/or radiating leg pain from a lumbosacral herniated intervertebral disc is a common medical and social condition. In lumbosacral herniated intervertebral disc, an intervertebral disc annular is torn and disc material leaks into the epidural space. This process leads to inflammation, which is frequently followed by fibrosis, adhesion, and spinal nerve compression. Percutaneous epidural adhesiolysis is a minimally invasive therapy in which a catheter is advanced directly into a lesion, such as herniated disc, scar tissue, and the stenotic portion of the spinal canal. Percutaneous epidural adhesiolysis as Racz neurolysis, percutaneous lysis of epidural adhesions, epidural neurolysis, and epidural decompressive neuroplasty. The injection of hyaluronidase, local anaesthetic, steroid and 10 % hypertonic saline infusion in this procedure may be effective in pain reduction and functional improvements in patients with chronic low back pain due to fibrotic tissue formation resulting from lumbosacral herniated intervertebral disc. Percutaneous epidural adhesiolysis is a safe and effective procedure for low back pain due to lumbosacral herniated intervertebral disc and it may be considered as an option for treatment before invasive operations are performed.

Keywords: Percutaneous epidural adhesiolysis, low back pain, lumbosacral herniated intervertebral disc, interventional pain management.

Update management in patient with increase intracranial pressure before referral to hospital

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Acute intracranial hypertension is a medical emergency requiring immediate intervention to prevent permanent damage to the brain. Many disease processes can result in A IH including traumatic brain injury (TBI), massive acute ischemic stroke, and intracerebral haemorrhage. Regardless of the cause, A IH is associated with worse outcomes. By the time the patient is in the emergency department, the damage of primary injury has made its mark and the processes of secondary injury have been set in motion. The key goals of the emergency response team are to stabilise and treat damage from the primary injury, to abrogate or minimize secondary injury, and to prevent secondary insults at all costs. The care in the field (prehospital setting) is a critical determinant of outcome for patients with acute intracranial hypertension especially with TBI. The initial evaluation of a patient suspected TBI should be done as soon as possible after the acute injury. The main principles are to maintain the brain oxygenation, avoid hypotension, mannitol or hypertonic saline administration and reduce brain tissue oxygen demand with hyperventilation therapy or analgesia and sedation. This study aimed to review the update management in patient with increased intracranial pressure before referral to hospital.

Keywords: intracranial hypertension, prehospital management, traumatic brain injury.
Paran’s injection and ligation for ambeien (PILA)

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Ambeien is very common anorectal condition, prevalence rate up to 4.4% in USA and 5.7% in Indonesia. From all hemorrhoid grades, 7% needed surgery (only 30% wanting surgery). Non-surgical hemorrhoid treatment cost: Employer Insurance (1.4 million cases, $770 million annually), with medicare + uninsured (2.5 million cases, $2.4 billion annually). It is important that patients receive high quality and cost-effective interventions that give them good quality of life and hemorrhoid symptoms control—Prof. Angus Watson (Consultant General and Colorectal Surgeon at Raimore hospital, Inverness and Director of Research, Development and Innovation for NHS Highland). Hemmoroid treatment in Universal for NHS Coverage (SJKN Era).

Keywords: hemorrhoid, surgery, management

Modern circumcision technique

Mahdian Nur Nasution
Owner of “Rumah Sunat” dr. Mahdian Clinic, Mahdian Klem’s inverter

Circumcision is a surgical procedure to remove a portion of the skin that covers the penis head. As time passes, circumcision is not limited to religions or groups. Several men in western countries, for example, are also circumcised for health reasons such as phimosis, paraphimosis, balanitis, posthitis, avoidance of condyloma acuminata and penile cancer, reduce the risk of transmission of sexually transmitted diseases, urinary tract infections, Human Papilloma Virus (HPV), the cause of cervical cancer, including the Human Immunodeficiency Virus (HIV). The time taken to perform the circumcision procedure varies considerably. Experienced doctors may only need about 10 minutes, while others may take up to 45 minutes. Circumcision wound healing process itself usually takes 5 to 7 days. The main principles of circumcision are asepsis, adequate incisions in the outer and inner lining of the preputium, hemostasis, protection of the gland and urethra, as well as pleasing cosmetic results. There are several circumcision techniques known today, including traditional, conventional (incision), and modern circumcision (including Clamps and Staplers). Lately, health practitioners, especially doctors, are more determined to use the clamp method because it is more practical. Furthermore, the circumcision process that is easier and faster, the clamping technique also has several advantages such as minimal bleeding, without stitches, the process of wound healing which is relatively faster compared to conventional circumcision (incision), as well as hygienic and safe. The World Health Organization (WHO) has recommended the clamping technique as a circumcision technique. The results of circumcision performed by the Clamping Technique (Mahdian Klem) also look better cosmetically, and also has a low complication rate than conventional circumcision techniques. The more varied modern circumcision tools basically to improve the safety and comfort for patients. However, to get all the benefits offered, circumcision must be carried out with correct procedure.

Keywords: circumcision method, modern circumcision, Mahdian Klem, stapler, human immunodeficiency virus, human papilloma virus.

Female circumcision: religion, law & medicalization

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A female circumcision, as well as male circumcision is a controversial issue. It has a suggestion for some people but on the other hand it will harm a genitalia female (vulva). Based on several literatures, everybody has a different point of view for female circumcision. One source said that a female circumcision to control sexual desire of young lady, and the next is they keep still virgin until getting married. One advantage of female circumcision is a female will have orgasm well with her partner. To Female Genital Mutilation (FGM) ‘s practice which removes some female genitalia in partial or all over whereas a female circumcision is going to tear a skin that covered a clitoris without injuring that one. Treating a clitoral hood is like “hoodectomy” as well as a common practice for surgeon doctors in the world. Cutting a clitoral hood needs special needles due to it is used for a kid who is still under five years old. Their clitoral hood is still thin and that is minim of veins and nerve, the other benefit is less bleeding and pain. The last advantage is clitoral hood will be opened once their adult as an organ growth, included vagina. On the other hand, a vagina will be kept healthy, hygiene & good smell. In religion that a female circumcision has been held by Islam and others, it depends on their holy books. Most of Indonesian Moslem believes that a circumcision is a must for both. That is an opinion from Imam An-Nawawi (a famous Kyai) in 676 BC. Common practice in Indonesia, a female circumcision was done by their ancestors especially for some Moslem. In early 2000, that is not familiar due to medical professionals who can handle that one are rare.

Keywords: female circumcision, female genital mutilation, procedure.

Basic vascular knot tying

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Direct surgery to the arteries began in the nineteenth to twentieth-century exchanges. Since then more and more extremities, body organs and their functions and lives can be saved from the danger of death. Vascular trauma is a challenge for trauma that requires urgent action to prevent loss of life or limbs. In doing repairs to vascular trauma, it is highly recommended to do a knot without instruments to avoid leakage due to isogenic due to instruments. Vascular suturing by passing the vascular wall through the intima. If end-to-end dissection is carried out, end-to-end anastomosis is unified with continuous suturing, other than that by using anastomosis patches. The knots in the vascular suturing use basic suturing using reef knot, surgeon knots and deep tying knots.

Keywords: vascular, suture, knot, technique.
Basic vascular suturing technique lecture

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Vascular surgery takes time. The general surgeon who does not perform vascular surgery regularly must prepare for it with a thorough revision of vascular anatomy and the incisions for exposure of major vessels. The basic techniques of arterial suture are straightforward, as are simple damage-control procedures. Vascular instruments are special and specific: DeBakey, Blalock and Satinsky vascular, and bulldog clamps, etc. To perform an excellent vascular suturing technique, it includes exposure of the diseased vessel, temporary interruption of blood flow, resection of the diseased segment, vascular repair or anastomosis and restoration of blood flow. In the presence of heavy bleeding from an important vessel, do not panic. The basic principles in vascular suturing are single sutures through all layers and intima-to-intima approximation, and basic technique in vascular anastomosis are: end-to-end anastomosis, end to side anastomosis and patch angioplasty. Perfect technique could be achieved if adequate exposure, including the healthy portions on both the afferent and efferent sides of the diseased segment is insured and therefore will facilitate subsequent steps in the procedure. Vascular sutures are monofilament, very fine and inserted on a non-traumatic eyeless needle. If vascular monofilament suture is not available, fine braided silk passed through subcutaneous fat to lubricate it may be used. Twisting, stenosis, and overstretch at the point of anastomosis are errors that result in failure of vascular reconstruction. General and topical heparinization is easy and a useful method to prevent the production of thrombus. Although continuous simple sutures are often used for vascular repair and anastomoses, in the case of anastomoses between small arteries, interrupted simple sutures are preferred to prevent stenosis. Post-operative surgical management includes systemic administration of anticoagulants, but it is not always needed.

Keywords: vascular surgical technique, vascular anastomoses, knot.

Forensic investigation in a multiple trauma deseleration case due to road traffic accidents

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Introduction: Road traffic accidents (RTA) is a series of events from road events that are unexpected, and always cause damage to objects, injury and even death. Factors for the occurrence of RTA can be in the form of vehicle, road and human. In this case RTA occurred because of human negligence and road factors. The human factors in the form of the driver driving a vehicle at high speed with an estimated 160 Km/h at night, the other factors the driver is sleepy or tired. Road factors contribute to the occurrence of accidents due to wide and declining road segments cause the driver unable to control vehicles at high speed, quiet roads and inadequate street lighting conditions. This accident resulted in a heavy damage to the vehicle and all passengers died. The explanation of the causes and patterns of death is important in forensic investigations of RTA victims.

Case description: A case of RTA with multiple deceleration injuries was reported. This traffic accident case involved a minibus car speeding and crashing into a bulk cement tank truck that was stopped on the Banda Aceh-Meulaboh National Road, on 30 October 2016 around 04.15 am which caused all passengers of minibus die. The speeding minibus car suddenly stopped and hit the back of the tank truck, as a result the body moving at the speed of the vehicle suddenly slowed down (deceleration) causing multiple trauma. The effects on the bodies of the victims varied in the form of open head trauma, closed head trauma, chest trauma, abdomen and extremities. The cause of death of the victims was massive bleeding in several organs, especially the head (traumatic brain injury) and chest (rib fracture).

Conclusion: Forensic investigations are very useful in determining the magnitude of the impact, direction, speed, and nature of the traffic accident.

Keywords: forensic investigations, traffic accidents, multiple trauma, deceleration.
Obstructive jaundice as manifestation of relapsing Hodgkin's Lymphoma: the success of chemotherapy

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Introduction: Hodgkin’s lymphoma is a hematologic malignancy of lymphocyte cells. Jaundice associated with lymphoma can be caused by intrahepatic or extrahepatic disorders. Jaundice in patients with lymphoma is often reported, but extrahepatic obstructive jaundice due to lymphoma is still rarely reported, the incidence is only 1.3% out of 370 patients.

Case Report: Male patient 44 years old, admitted to the hospital because his eyes and all over body became yellowish, felt itchy on his skin and stool color was pale. The patient was diagnosed with a post-chemotherapy relapse of Hodgkin’s lymphoma twice with different regimens. The first chemotherapy was cyclophosphamide, hydroxydaunorubicin, oncovin, prednisone (CHOP) regimen. We evaluated nine months after chemotherapy. Abdominal CT-scan found paraaortic lymphadenopathy with infiltration to the spleen and gaster. Then, the patient was re-chemotherapy using Mesna’s ICE (Ifosfamide, carboplatin, etoposide) regimen. Seven months after second chemotherapy, patient was re-admitted to the hospital with jaundice throughout his body. Laboratory results were 25.3 mg/dl for total bilirubin, 21.5 for direct, AST 199 U/L, 213 U/L for ALT, 469 mg/dl for ALP, and 6400/mm3 for leukocytes. Abdominal ultrasound found gall bladder hydrops and Intra-Hepatic Bile Duct Dilatation (IHBD). PET-scan showed multiple metastases to the peritoneal/omentum and diffuse lymphomatous infiltration in the gastric. Patient was given the third chemotherapy with gemcitabine and vinorelbine regimens. Laboratory results three weeks post-chemotherapy found significant clinical improvement after the third chemotherapy. Obstructive jaundice due to lymphoma is indeed challenging to diagnose. Biliary tract can be compressed due to lymphoma in any locations, but the obstruction is mostly founding the hilar region of liver or around pancreas head. The mechanism of obstruction can be due to decreased biliary duct motility caused by the Hodgkin’s lymphoma compression. The management of obstructive jaundice caused by Hodgkin’s lymphoma consists of chemotherapy, surgery and biliary drainage. In this patient, jaundice was not caused by infection, but the symptoms caused by obstruction also began to disappear after chemotherapy.

Conclusion: Obstructive jaundice is a manifestation that is rarely found in Hodgkin’s lymphoma. Chemotherapy is one therapeutic choice in management of obstructive jaundice related to Hodgkin’s lymphoma.

Keywords: Hodgkin’s lymphoma, obstructive jaundice, chemotherapy.

Neuroendocrine tumor of extrahepatic biliary tract

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Introduction: Neuroendocrine tumor (NET) is a rare type of tumor. Including carcinoid tumor, but NCCN Clinical Practice Guidelines in Oncology in 2015 stated that “neuroendocrine tumor of the gastrointestinal and pancreatobiliary system” was more appropriate to be used to all endocrine tumors of the digestive system, because all the tumors derive from the diffuse neuroendocrine system. Average incidence is 2.5 cases per 100,000 per year. Reported case by Pilz first, there is less than 200 cases of NET since 1961. Clinical manifestations of NET are various, NET is differed to functionally active and inactive type.

Case report: 18-year-old female with a lump in the upper right abdomen that had been felt since last 8 months. We found a mass with solid consistency, fixed, smooth surface, flat edge, ad no pain. Laboratory examination obtained leucocyte 5,400 / ul, total bilirubin 0.69, direct bilirubin 0.30 and indirect bilirubin 0.39. On CT scan, it was an enlargement on vesica felea, normal and regular wall, and we did not get the existence of stone and sludge. Cholelucus duct and cysticus duct appeared normal and there was a small stone with round-shaped, with a size of 0.5 cm. Bile fluid flowed smoothly from the ductus cysticus to distal and emptied into ampulla vateri. Based on a CT scan, conclusion is choledolithiasis. Diagnosed early with an intra-abdominal tumor. Intraoperative was found in the pancreas cap with a cyst size of 9 cm x 7 cm x 8 cm, and stuck to duodenum, excision on the uncinate process of the pancreas. Postoperatively, patient was treated in a stable condition with tumor histopathology results are carcinoid tumor (neuroendocrine tumor).

Conclusion: Neuroendocrine tumor is a type of tumor that contains of multipotential cells that can secrete various hormones such as vasoactive, serotonin, gastrin, somatostatin, glucagon, and insulin. Initial work-up for patient with suspected NET is CT scan. The bad indicators are the involvement of lymph nodes, metastases were detected when the tumor first diagnosed, and the presence of lymph and vascular invasion of tumor.

Keywords: Neuroendocrine, endocrine, carcinoid, management.

Spontaneous intracerebellar haemorrhage and hydrocephalus: a case report

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Introduction: Hemorrhagic strokes affect more than 1 million people every year worldwide and are the most frequent type of stroke with high mortality and morbidity rates. Spontaneous Intracerebral Hemorrhage (SICH) often affects the basal ganglia, thalamus, cerebral lobes, pons, and cerebellum.

Case description: In this report, we present a 63-year-old female with sudden onset loss of consciousness and computed tomography (CT) of head demonstrated an intracranial haemorrhage in the cerebellum with hydrocephalus. The existence of hydrocephalus and the development of chronic
Pain management in fibrosarcoma: case report

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Introduction: Fibrosarcoma is a tumor of mesenchymal cell origin that can occur as a primary or secondary bone tumor. When diagnosed, the patient’s overall prognosis is generally quite poor. At the time of their diagnosis, approximately 30–50% of cancer patients have experienced pain. Consequences of unrelieved pain include loss of autonomy, social isolation, suffering, psychological distress, and the diminished ability to comply with the cancer treatment.

Case Report: A 37-year-old female was consulted to our department because of painful swelling of the soft tissue surrounding the proximal right humerus since 6 months. Patient gave the history of same complaints of right lower abdominal pain, fever, nausea, and vomiting. Then A Thirty-year-old pregnant woman G4P3A0, 22-23 weeks gestational age came to the emergency room at Pidie Jaya Hospital with chief complaint lump on the left thigh since 3 years ago, the lump is swelling and pain. The patient had excised the lump in the regional hospital, but intraoperative was found a lot of bleeding, and palpable pulsation on the side of mass. Patient is referred to Zainoel Abidin hospital with suspicious femoral artery aneurysm. From the result of physical examination found stable hemodynamic, pain, swelling and minimal bleeding from operation wound. Patient with history of heart disease and hypertension.

Conclusion: A general practitioner should be able to carry out appropriate initial management to reduce morbidity and mortality.

Keywords: cerebellar haemorrhage, hydrocephalus, stroke.

Revascularization after soft tissue tumor wide excision, succesfull limb saving

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Introduction: Management of cases with unruptured aneurysm usually can be treated in a single stage with excision of the osteochondroma along with repair of the vessel using any of the techniques; patch arterioplasty, ischemic symptoms also thrombosis of the veins end to end anastomosis, interposition vein or prosthetic graft or stent grafting using endovascular techniques, whereas cases with ruptured aneurysm may require multiple procedures and bypass grafting as was done in this case.

Case Report: Male, 65 years old referral from regional hospital came to Zainoel Abidin emergency room (ER) with chief complaint lump on the left thigh since 3 years ago, the lump is swelling and pain. Patient had excised the lump in the regional hospital, but intraoperative was found a lot of bleeding, and palpable pulsation on the side of mass. Patient is referred to Zainoel Abidin hospital with suspicious femoral artery aneurysm. From the result of physical examination found stable hemodynamic, pain, swelling and minimal bleeding from operation wound. Patient with history of heart disease and hypertension.

Conclusion: Vascular injury due to tumor infiltration requires early diagnosis and prompt treatment to avoid fatal consequences, there are many causes vascular injury including intraoperative tumor excision can cause total rupture artery and venous. In this case occurs infiltrating tumor to the blood vessels, so the blood vessels were also removed. And then performed Bypass femoro-femoral arter and venous with RSVG end to side anastomose to save the lower limb.

Keyword: vascular injury, bypass graft, limb saving, revascularization.

Management of acute appendicitis in pregnancy at Dr. Zainoel Abidin General Hospital, Banda Aceh: a case report

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Introduction: Acute appendicitis is an emergency extra uterine surgery which is most often found during pregnancy. The reported incidence of appendicitis ranges between 1:1250 and 1:1500 pregnancy. We try to describe our case of acute appendicitis in pregnancy at Dr Zainoel Abidin General Hospital.

Case description: A Thirty-year-old pregnant woman G4P3A0, 22-23 weeks gestational age came to the emergency room at Pidie Jaya Hospital with complaints of right lower abdominal pain, fever, nausea, and vomiting. Then

We reported three cases of intradural extramedullary th

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motor neuron paraparesis, segmental hypesthesia at 4

Keywords

the main treatment for acute appendicitis regardless of the choice of surgical
technique.

Keywords: acute appendicitis, pregnancy, appendectomy.

Intradural extramedullary spinal tumors:

case series and literature review

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Introduction: Intradural extramedullary tumors are the most common tumor in intradural spinal that are 60% of spinal tumors. The anatomical classification must be understood because it is useful in clinical examination, treatment planning, and determining the prognosis.

Case description: We reported three cases of intradural extramedullary spinal tumors in Dr.Zainoel Abidin General Hospital. Case 1. Ny.K, 48 years old, progressively experienced back pain with neurological deficits such as upper motor neuron paraparesis, segmental hypesthesia at 4th thoracic segment, and urinary retention. Thoracolumbar MRI is intradural extramedullary mass at 3rd-4th thoracic vertebrae. Patient underwent tumor removal laminectomy and the pathology is psammomatous meningioma. Mortonic improved after the sixth post operative day. Case 2. Ms.N, 27 years old, progressively experienced upper back pain with neurological deficits such as tetraparesis upper motor neurons, segmental hypesthesia at 1st-2nd thoracic segment, and urinary retention. Cervical MRI is intradural extramedullary solid mass at 6th-7th cervical vertebrae. Patients underwent tumor removal laminectomy and the pathology is fibroblastic meningioma. Mortonic improved after the sixth post operative day. Case 3. Ny.R, 48 years old, progressively experiences neck pain with neurological deficits such as upper motor neuron tetraparesis, segmental hypesthesia at 4th cervical vertebrae, and urinary incontinence. Cervical MRI is intradural extramedullary mass at 3rd cervical vertebrae. Patients underwent tumor removal laminectomy and the pathology is angiomatosus meningioma. Patient died in the seventh post operative day.

Conclusion: Intradural extramedullary tumors are common in adult women, with the most common pathology type is meningioma. Prognosis depends on the tumor location.

Keywords: Intradural extramedullary tumor, spinal tumor, meningioma.

Off-pump coronary artery bypass grafting (OPCAB) with support of intra-aortic balloon pump (IABP) in patient with poor left ventricular function: a case report

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Introduction: The OPCAB procedures provide benefits to high-risk patients compared to on-pump coronary artery bypass grafting (ONCAB) procedures. The use of IABP has been proven to reduce mortality and morbidity of high-risk patients who have been treated with coronary artery bypass grafting (CABG). In this article we report a case of patient with poor left ventricle function who performed OPCAB procedure and supported by the use of IABP.

Case description: Male patient aged 60 years with complain of shortness of breath during mild activity was referred to cardiothoracic and vascular department of Arfin Achmad General Hospital. He was diagnosed with congestive heart failure due to coronary artery disease. History of smoking 3 packs per day since 20 years ago and failed PCI about 7 months ago. Coronary angiography revealed three-vessel disease. Echocardiography examination showed severe hypokinetic at septal, anterior, and lateral. Left ventricular ejection fraction (LVEF) was 22%. Preoperative IABP was inserted 1 day before surgery. The OPCAB procedure was carried out successfully for 3 hours and 20 minutes using autologous graft from left internal mammary artery (LIMA) and great saphenous veins (GSV). Echocardiography evaluation 1 day post-surgery showed LVEF was 45.50%. Patient was treated in surgical intensive care unit (ICU) for 4 days and discharged 8 days post-surgery. IABP was started to weaning after 13 hours and removed after 34 hours post-surgery.

Conclusion: In this case, OPCAB procedures supported by the use of IABP provide good outcome post-surgery in patient with poor left ventricular function.

Keywords: case report, CABG, OPCAB, IABP, management.

Avascular necrosis: a case series and literature review

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Introduction: Avascular necrosis is a disease caused by reduced blood supply to the subchondral bone leading to destruction. It is characterized by osseous cell death due to vascular compromise which cellular death of bone component occurs due to interruption of the blood supply. Avascular necrosis of bone results generally from corticosteroid administration, trauma, SLE, pancreatitis, alcoholism, gout, radiation, sickle cell disease, infiltrative diseases, Caisson disease and rarely by infections. The most commonly affected sites are femoral

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and humeral head and patient’s usually present with hip and referred knee pain. Initially, patients are asymptomatic, but in time, AVN leads to joint destruction, requiring surgical intervention and in later stages, total hip replacement. Plain radiography, Computerized Tomography and Magnetic Resonance Imaging play a pivot role in clinching the diagnosis and has been proved to be a highly accurate method both for early diagnosis and for staging of the disease.

**Case description:** Case 1. A man 49 years old has pain in the left hip. Left hip pain is felt extending to the left buttocks and the outer left thigh. Pelvic photo examination showed subluxation in the left femur with destruction in the left femoral head and looks sclerotic and irregular. Case 2. A woman 21 years old with left lower pelvic pain. Pain is not widespread, feels throbbing and cramps in the left pelvic. Patient with a history of trauma 4 years before. Pelvic photo examination showed hypersclerotic on left hip joint with avascularization in the left femoral head. Case 3. A man 30 years old has pain in the left hip and hard to move the left leg due to pain. Left hip pain is felt extending to the left buttocks and the outer left thigh. Patients with a history of falls. Pelvic photo examination showed subluxation in the left femur with destruction in the left femoral head.

**Conclusions:** Patients presents with hip pain secondary to trauma and/or corticosteroid use, the clinician must include avascular necrosis as a differential. The diagnosis is confirmed by imaging procedures. MRI has been proved to be a highly accurate method both for early diagnosis and for staging of the disease.

**Keywords:** avascular necrosis, corticosteroid, SLE, total hip replacement.

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**Bilateral posterior fossa epidural hematoma and sequel dysmetria: case report and review of literature**

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**Introduction:** Posterior fossa epidural hematoma (PFEDH) is an uncommon diagnosis in the traumatic brain injury and is only about 4–7% of EDH. This condition has high mortality rate if it is not managed immediately. Early diagnosis by CT imaging and EDH evacuation is very important to improve patient outcome. Dysmetria is a condition in which there is improper measuring of distance in muscular acts. Dysmetria occurs when lesions develop on your cerebellum, in this case this condition caused by EDH pressure in posterior fossa. Posterior fossa epidural hematoma (PFEDH) is uncommon in the traumatic brain injury and is only about 4–7% of all EDHs. Early diagnosis and evacuation are very important to improve patient outcome. Dysmetria is one of sequel after lesion in posterior fossa, especially that affects the cerebellum.

**Keywords:** epidural hematoma, craniootomy, dysmetria.

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**Same side double epidural hematomas: case report and literature review**

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**Introduction:** Double epidural hematomas (DEDH) is a rare diagnosis and an emergency condition. DEDH may be unilateral or bilateral 2–10% of all epidural hematomas (EDH). The occurrence of EDH in same side is quite rare. The mortality in single EDH patients was 9% while it was 34.8% in patients having double EDH. The mortality was significantly higher in patients who sustained vehicular accidents. We report a rare case of same side double EDH patient post vehicular accident in Zainal Abidin General Hospital.

**Case description:** A 18-year-old male presented with a complaint of severe headache and vomiting following motorbike accident, 2 hours before hospital admission. At admission, he was in altered mental status and had features of elevated intracranial pressure. On clinical examination, the patient was not oriented to time, place, and person, Glasgow Coma Scale (GCS) was E3M5V4. He had one episode of 2-minutes seizure, he was unconscious after the seizure. Routine laboratory tests showed reactive leucocytosis (15,000/mm3), and other results were normal. The Head Computed tomography (CT) scan performed immediately after admission revealed acute EDH at the left frontal and temporoparietal region, the mass effect with midline shift measuring approximately 5 mm toward the left, the estimation of hematoma volume was 80 cc. The patient was referred to Neurosurgery department. An emergency craniotomy was done. Post-operatively, the patient managed by a neurosurgeon and a neurologist. The mental status and neurological deficit gradually revealed post-craniotomy. Three days after surgery, the patient had dysmetria and treated by a neurologist conservatively. He discharged on post-operative day 5th.

**Conclusion:** Posterior fossa epidural hematoma (PFEDH) is uncommon in the traumatic brain injury and is only about 4–7% of all EDHs. Early diagnosis and evacuation are very important to improve patient outcome. Dysmetria is one of sequel after lesion in posterior fossa, especially that affects the cerebellum.

**Keywords:** posterior fossa epidural hematoma, craniootomy, dysmetria.
Operative stabilization of a patients with flail chest and pulmonary contusion three days after referred from the rural hospital

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Introduction: Traumatic thoracic injury is currently the second leading cause trauma-related death after head injury and rib fracture are the most common of thoracic injury. Flail chest, as defined by the presence of three or more consecutive rib fractures in 2 or more places characterized by paradoxical motion of flailing chest wall. An associated injury directly related to flail chest is pulmonary contusion. Pulmonary contusion in turn is the most common injury in blunt thoracic trauma, occurring in 30% to 75% of all cases.

Case description: a 69-year-old woman was referred from the rural hospital to the RSUZA emergency room with chief complaints of unconsciousness since 6 days ago. She felt down from 6-metre high pinang tree. Resulting huge area: lesson learn from delayed diagnose, successful limb saving

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Introduction: Blood vessels trauma can cause limb-threatening to the affected part accompanied by signs of shock. The sign and symptoms can be identified with clinical symptoms such as, hard sign and soft sign. Vascular trauma requires diagnose and prompt treatment to avoid the fatal consequences of amputation. Management of surgery for peripheral arterial injury requires preparation of the entire injured limb. In addition, healthy contralateral upper or lower extremities must be included to anticipate if venous autograft is needed.

Case description: Male, 49 years old, came to Zainoel Abidin ER with chief complaint pain active bleeding from unhealed wound on the left thigh since 6 days ago. He felt down from 6-metre high pinang tree. Resulting huge open wound size 7cm x 5cm x 5cm, he was hospitalized at rural hospital with stable hemodynamics. There is no evidence on vascular trauma the patient was performed debridement electively intraoperatively found active bleeding suspected ruptured of the left femoral artery. Complain on severe extremely pain and swelling on the left thigh, cold on the distal part, non-palpable pulse on popliteal and dorsalis pedis artery. Suspected femoral artery injury the patient was proceeded for emergency surgery. Performed intraoperative arteriography found extravasation of contrast of 1/3 middle left femoralis artery, continues with vascular exploration found pulsatile haematoma size 10cm x8cm x6cm and it was removed. Identified partial ruptured of 2/3 middle of the left superficial femoral artery Performed repair with Prolene 7.0, Performed arteriography 90 % stenosis at the repaired site, Performed resection and end to end anastomosis, the anastomose was tension, performed bypass femoro-femoral with RSVG end to side anastomose, Performed arteriography contrast flow until distal, the patient went home on five day after surgery at follow up.

Conclusion: Vascular trauma requires early diagnosis and prompt treatment to avoid the fatal consequences. Delayed diagnose will increase the risk of limb amputation. Revascularization is the best treatment in vascular trauma. Peripheral bypass graft is safely and useful procedure for limb salvage.

Keywords: delayed diagnose, vascular trauma, revascularization.
Anaplastic meningioma: case report and review of the literature

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Introduction: Anaplastic meningioma is a rare malignant tumor in meninges, membranes which covers the brain. It develops aggressively. This tumor represents 1% - 3% of all meningiomas, with more aggressive histopathological characteristic and poor clinical prognosis.

Case description: A 38-year-old woman presented to emergency department with progressive chronic headache, blurred vision and altered from one year ago. On clinical examination, it was found protruding of right eye. The Head Computed Tomography (CT) scanning showed a heterogeneous solid mass in the right frontal lobe. The patient was referred to neurosurgery department in consideration to perform removal tumor procedure. The tumor was removed by craniotomy procedure. Macroscopically, there was a solid mass bounded firmly in the right frontal lobe measuring 7.5 x 6 x 2.5 cm, it was not infiltrate the oculi bulb. Microscopic examination of the tumor revealed a large number of hypercellular areas with a high mitotic index, and focal necrosis with the psammoma body. It was suggested for further examination with immunohistochemistry by using antibody panels such as EMA, vimentin, CD34, GFAP, pan-cytokeratin and Ki67.

Conclusion: The final diagnosis of this case is an anaplastic meningioma, WHO grade III. This case report describes the clinical presentation, imaging, and histopathological findings, and prognosis of the tumor. Because of the similarity of morphology to the other tumors, the diagnosis of anaplastic meningioma may be difficult. The biggest risk factor of meningioma is middle-aged adult women.

Keywords: anaplastic meningioma, clinical presentation, imaging, histopathology

Dose adjustment of analgetic in treatment of pancreatic cancer pain

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Introduction: Pancreatic cancer is one of the most aggressive tumors with less than 5% survival at 5 years. At early stages, pancreatic cancer often asymptomatic. Many signs and symptoms appear gradually with progressivity of disease such as jaundice, abdominal and back pain, digestive problems, weight loss. Because pancreatic cancer is one of the most painful malignancies, pain control is considered as one of response criteria to the treatment. Analgetic treatment has special attention as one of medical approach in pain management in cancer of the pancreas.

Case description: A 49 years old man came to emergency room with chief complain hematemesis and melena since 1 month ago. Patient has weight loss and jaundice during 1 month ago. Patient also suffered from abdominal pain radiating to anterior chest and back typical presentation for pancreatic cancer. Pain sensation was like hot-burning in left upper hypochondriac. Numeric rating scale was 9. From laboratory test, we found elevated SGOT/SGPT level. From abdominal ultrasound we found mass with size 51.7 x 58.4 mm in pancreas with hypertrophy gall bladder. From abdominal scanning we found peri ampula mass stick out from pancreas caput with dilatation of biliary system. Patient was given paracetamol infusion 1000 mg every 8 hours, pregabaline 150 mg every 12
ABSTRACT

Pain management in advanced lung cancer: case series and literature review

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Introduction: Lung cancer is the most common cancer worldwide, accounting for 1.2 million new cases globally each year. A meta-analysis of 32 studies shows prevalence of pain in those with lung cancer was 47%. Pain affected 27% of outpatients with lung cancer, 76% in palliative care and may affect quality of life. Patients with lung cancer, 40% will develop bone metastases, 33% brain metastases, and 20% chest pain during the course of their disease.

Case description: Case 1. A 55 y.o male with left lung Adenocarcinoma, metastasis to right scapula and femur. Presented with pain in the right shoulder, worsening 2 weeks before admitted to the hospital. Numeric Rating Scale (NRS) decreased gradually after 2 days of therapy. Case 2. A 77 y.o male with lung cancer metastasis to fourth-fifth thoracic vertebra, had severe back pain as main complaints since 2 weeks ago. Pain felt as banded, prickling and burning sensation on upper chest. After 5 days of treatment, NRS was decreased to 4. Patient was diagnosed with lung cancer metastasis to fourth-fifth thoracic vertebra. Case 3. A 43 y.o male with right lung Squamous Cell Carcinoma, metastasis to right shoulder, complained with severe pain, paralysis and numbness of right hand. NRS decreased gradually after 2 days of therapy. Case 4. A 43 y.o male with Pancoast Tumor, metastasis to right shoulder since 2 months ago. Pain referred to lateral side of right arm and palm. Moderate to severe pain feel like burning, sharp and throbbing sensation. All patients had decreased NRS gradually up to 45-55% after got intravenous drip of Tramadol 50 mg for 30 minutes and Gabapentin 300mg-300 mg~ 400 mg.

Conclusion: Active multidisciplinary approach is required to manage pain in patients with advanced lung cancer. Pain can be multifactorial in this population, therefore may require several different pain management.

Keywords: lung cancer, pain, cancer pain, metastases.

Management of cancer pain with analgetic adjuvant and weak opioid in urology metastatic cancer pain

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Introduction: In cancer patients, cancer pain is the most common cancer complication. About 60-90% of patients with advanced cancer stage experience pain with various level of pain, and about 30% of patients have been suffering from persistent severe pain. Bone is the most frequent target of metastases in patients with cancer such as breast, prostate, lung, kidney, and thyroid. In advanced prostate cancer, bone metastasis leads to bone pain, skeletal fracture, and increased mortality. At least 75% of patients with bone metastasis experience the bone pain.

Case description: We report 3 (three) cases of cancer pain, treated with primary cancer from the prostate metastasis to the spine. All three patients had lower back pain and radiated to the left and right limbs, with mixed pain and bone pain, where early hospital admission shows the Numeric Rating Scale (NRS) pain scale 9-10. Treated with administration of adjuvant therapy (Gabapentin) and weak opioids (injections of tramadol) as well as injection of Methylprednisolone (for 3 days), the patient’s pain scale was evaluated, and the average NRS obtained on days 2-4 was 5-6. On day 5-8, treatment continued with Gabapentin and Tramadol injection, and the pain scale (NRS) decreased to 2-3. All patients on the 8-9th day of treatment also received Biphosphonates to reduce pain, bone damage, fracture risk and blood calcium levels. Patients are allowed to discharge being prescribed with only oral Gabapentin.

Conclusion: A pain scale (NRS) reduction of >50% is obtained from the initial pain scale in cancer pain patients treated using combination of adjuvant therapy and weak opioids.

Keywords: cancer pain, bone pain, bone metastasis, prostate cancer, adjuvant therapy, weak opioids.

Brain abscess: case series and review of literature

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Introduction: Brain abscess is a pyogenic reaction localized to brain tissue and focal intracerebral infections caused by a variety of bacteria, fungi and protozoa. There are several mechanisms of germs entering the brain, namely
direct expansion of the focal contact of infections originating from the sinuses, teeth, middle ear or mastoid, hematogenously, after open head injury and cryptogenic.

**Case description:** Case 1. A man 47 years old has severe headache, fever and pain in the right ear with a smelling discharge. On neurological examination found weakness of the left limb, and the left facialis nerve paresis. Contrast head CT Scan showed multiple hypodense lesions were found in the right frontal lobe. These patients were given the 3rd generation cephalosporin and metronidazole In this patient surgery is not performed. Case 2. A woman 21 years old has slowly decreased consciousness, severe headache, fever and seizure. The patients have history of left ear pain with a smelling discharge. Contrast CT scan shows abscess in the left temporal lobe and left occipital. Patient had craniotomy evacuation and pus abscess culture in the form of Proteus Mirabilis bacteria which is originating from an autogenic infection. Case 3. An 18-year-old man has slowly of left limb weakness, fever, severe headache. Physical examination found heart noise, and clubbing fingers. Neurological examination found weakness of the left limbs, and left facial nerve paresis. CT scan showed multiple hypodense lesions in the right temporoparietal lobe. Echocardiography examination describes tetralogy of fallot. The patient’s family refused to be operated on. Subsequent treatment with adequate antibiotic administration. These patients were given the 3rd generation cephalosporin and metronidazole.

**Conclusions:** Management of brain abscess must be done immediately because early management has an impact on improving the prognosis of the disease.

**Keywords:** brain abscess, chronic supplicative otitis media, tetralogy of fallot.

**Bilateral chronic subdural hematoma: two consecutive case report and review of literature**

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**ABSTRACT**

**Introduction:** Bilateral chronic subdural hematoma (CSDH) is occasionally found. Bilateral CSDH initially appears as focal neurological deficits with or without signs of increased intracranial pressure. The onset of symptoms is generally delayed several days, weeks and even months after the first injury. Bilateral CSDH is clinical emergencies that require immediate and rapid management to prevent significant morbidity and mortality.

**Case description:** We report 2 cases of bilateral chronic subdural hematomas was brought to our Emergency Department 1 case in August and 1 case in September 2019 with neurological symptoms headache followed by loss of consciousness. Patient had history of head injury several months before. Head computed tomography scan showed crescent-shaped lesions with acute (hyperdense) and chronic (hypodense) components in the right and left fronto-temporo-parieto-occipital regions. The patient underwent surgical evacuation of the hematomas by 2 Burr-holes placed in the parietal region and 2 drains positioned bilaterally that were removed the day after surgery. After surgery and treatment, awareness improves.

**Conclusion:** In case of bilateral CSDH, preexisting brain atrophy facilitates CSDH bilaterally after rupture of bilateral stretched bridge vein at the same time or at the different time. This chronic process runs slowly and tends not to be a concern of sufferers until this CSDH becomes very large and makes awareness decrease and threaten lives. Bilateral CSDH should be suspected in elderly patients with history of trauma. Rapid and appropriate management will provide a better prognosis.

**Keywords:** bilateral chronic subdural hematoma, traumatic brain injury, neurological deficits, burr-hole drainage.
ABSTRACT

Health post as an indicator of the development of health clusters in disaster: earthquake case series in Pidie Jaya, Lombok and Palu, Indonesia

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Introduction: The role of health clusters in a disaster is vital, both in the emergency response phase and rehabilitation and reconstruction, quick response and accuracy of the services provided by the medical authorities can even significantly reduce fatalities. Health post in a disaster is one of the supporting factors for medical teams who come to help in the disaster area. The development of health posts from the condition of the earthquake disaster in Pidie Jaya, Lombok and Palu were seen continuing to move towards a better direction. The role of the health post which initially as a place to report the medical assistance team that came later developed into a place for the entire medical assistance team to search for information, conduct evaluations, get additional drug logistics to become a meeting point even not just for the medical team. The things that form the basis of an ideal assessment whether or not a health post in a disaster area, identification, access, officers, information, coordination meetings, availability of medicines, vaccination of officers, communication networks, consumption, accommodation and other innovations.

Case description: There were three earthquake case series. The Pidie Jaya earthquake in December 2016 the health post had an identification team, access, officers, information, coordination meeting, availability of medicines. In the earthquake the Pidie Jaya health post was able to meet 60% of the criteria. The Lombok earthquake in July 2018, the health post had a team of identification, access, officers, information, coordination meetings, availability of drugs, and vaccination of officers. The Lombok earthquake the health post was able to meet 70% of the criteria. In the Palu earthquake of September 2018, the health post had a team of identification, access, officers, information, coordination meetings, availability of drugs, and vaccination of officers, communication networks, and consumption. In the Palu earthquake the health post was able to fulfill 90% of the criteria.

Conclusion: The results show that the health post is getting better and ideal in disaster.

Keywords: Health post and disaster, management, strategy.

Limb salvage by femoro-popliteal bypass in acute limb ischaemia due to femoral artery total occlusion: a case report

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Introduction: Acute limb ischaemia is emergency condition in vascular surgery. A patient who presents acute limb ischaemia is associated with high risk of amputation and death. In this article we report a case of limb salvage of patient with acute limb ischaemia due to femoral artery total occlusion by femoro-popliteal artery bypass.

Case description: Male patient aged 55 years with complaints of severe pain in right lower extremity was come in emergency unit of Arifin Achmad General Hospital. He complained of severe pain suddenly in the right leg since 4 days ago. His right leg was cyanotic, cold, and the toes turn black. His popliteal and dorsalis pedis pulses were not palpable. Saturation of the toes was not measurable. CT angiography was performed immediately then revealed total occlusion in right femoral artery. Emergency femoro-popliteal bypass was performed successfully using autologous graft from left saphenous vein. Right after bypass the leg was warm, cyanosis in the leg was disappear and the saturation was returned to normal.

Conclusion: Emergency femoro-popliteal bypass which performed in acute limb ischaemia was successfully salvaged the lower extremity with good outcome.

Keywords: case report, limb salvage, femoro-popliteal bypass, acute limb ischaemia.

Chronic regional pain syndrome non traumatic: case report

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Introduction: Complex regional pain syndrome (CRPS) is characterised by swelling, pain, skin changes, sensory abnormalities, motor alterations and vasomotor instability of the affected extremities. The pathogenesis is not completely understood, multiple hypotheses have been suggested and several predisposing factors have been identified. Clinical diagnosis is usually based on symptoms and physical findings. One of Pathophysiology in CRPS is tissue damage mediated by classical inflammation mechanisms (IL-1, IL-6, TNF-alpha, CD4, macrophages, neutrophils) and neurogenic, mediated by proinflammatory cytokines and neuropeptides released directly by nociceptors in response to various causal factors. There is no definitive diagnostic test, diagnosis is mainly based on a complete medical history and physical examination. Treatment is multidisciplinary and based on pain relief. In 40% of cases it is associated with a fracture or surgery, with compression of the median nerve being the most common, although it can also appear after a sprain (10%), root lesions (9%), lesions of the spinal cord (6%), and spontaneously (5-10%). It was found that it more frequently affects women (3:1) with a peak between 50 and 70 years of age, with a predominance in the arms.

Case description: A 40 year female presented to the RSUDZA with complains of severe the left arm pain and stiffness, persisting for more than 2 months initially the patient complained of swelling in the left arm followed by a change of skin, pain in the arm area felt spread to the tip of the finger accompanied by numbness. The patient met the criteria for establishing a probable diagnosis of complex regional pain syndrome (CRPS). The patient was administrated of Gabapentin (300 mg third daily) and tramadol injection (50 mg twice daily).

Conclusion: Complex regional pain syndrome (CRPS) is a condition of weakness explained by the patient.
Difficult pediatric airway in encephalocele patient with cranium bifidum

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Introduction: Congenital anomalies of the central nervous system generally occur as a midline defect. The dysraphism may occur anywhere along the neural axis, involving the head (encephalocele). Encephalocele is a mesodermal defect in the skull bones and dura mater. Large defect may present challenges to endotracheal intubation. The pediatric airway is different from adult both anatomically and physiologically.

Case description: We report a case of giant encephalocele with difficult intubation in an 18 days old infant underwent excision and reconstruction of encephalocele. Difficult intubation happened because of such a large head size, positioning, and age-related pathophysiology. The patient also comorbid Patent Foramen Ovale (PFO). At the time after induction, the patient was positioned with supine position. We secured the head and lifted the shoulders about 10 cm. Direct laryngoscopy was done with this position and vocal cords were identified. Placement of the endotracheal tube was successful after two attempts of intubation. Intubation was confirmed by bilateral breath sound. The patient was positioned based of the surgery requirement.

Conclusion: Maintenance of spontaneous ventilation after induction of anaesthesia is key to managing the difficult airway. A number of difficult airway tools are available. A plan for extubation is extremely important. In planning strategy for the management of encephalocele, one need to take into consideration the site, size, contents, patency of CSF pathway, neurological status and other associated anomalies. Post operative follows up should be done at regular interval to look for hydrocephalus or other neurological deficit.

Keywords: difficult airway, pediatric, encephalocele, cranium bifidum.

Management anaesthesia for hydrocephalus in pediatric patient

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Introduction: Hydrocephalus in a neonate may be congenital or acquired. Congenital hydrocephalus occurs in 0.5 to 0.8 per 1000 live births. Causes include neurologic pathologies like neural tube defects, genetic disorders, or idiopathic. Many infants with congenital hydrocephalus are premature, and therefore problems associated with prematurity are also essential concerns. Acquired hydrocephalus at birth may be a consequence of infection, intraventricular hemorrhage, trauma, and tumors. Neonatal hydrocephalus, whether it is congenital or acquired, can result in poor neurologic outcomes due to multiple shunt failures, as well as irreversible cellular damage and ischemia associated with ventriculomegaly. A mortality rate of 25% within the first week of life and 38% at 1 year of age has been reported. Here, we present a case of anaesthetic implications in a six months old male with severe hydrocephalus. The patient’s mother reviewed the case report and photographs and has given consent for publication.

Case description: A 6 months old, 40 weeks one-day gestation male born with a head circumference of 52.5 cm (>99th percentile) and weight of 4810 grams (>97th percentile). The neonate with congenital hydrocephalus can present multiple challenges for the anesthesia, but with proper preparation, one can optimise these issues and minimise the risks of anaesthetic complications. Postoperatively, the neonate is at risk for chronic neurologic deficits. Between 28 and 78% of patients with congenital hydrocephalus suffer from developmental or neurologic delays.

Conclusion: Congenital hydrocephalus can present multiple challenges, including undiagnosed genetic abnormalities, prematurity associated comorbidities, and distortion of normal airway anatomy by macrocephaly. Neonatal neurophysiological differences can also affect intracranial pressure management. With proper preparation, one can optimise these issues and minimise the risks of anaesthetic complications.

Keywords: congenital, hydrocephalus, anaesthesia, complication.

Brain protection to avoid secondary injury because of intracranial metallic foreign body

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Introduction: Brain protection is a preemptive action before therapeutic intervention to resolve neurologic outcome with risk brain ischemic patient. Secondary brain injury is a term used to describe the aggravation of TBI over subsequent minutes to hours as a consequence of various factors, such as hypoxemia, hypotension, hype or hypercarbia, hypo or hyper glycemia, hypo or hyperthermia and seizures. Neuroprotective strategies that limit secondary tissue loss and/or improve functional outcomes have been identified in multiple animal models of ischemic, hemorrhagic, traumatic and nontraumatic cerebral lesions. In this paper, we summarize the current status in terms of neuroprotective strategies, both in the immediate and later stages of acute brain injury in adults. We also review potential new strategies and highlight areas for future research.

Case description: Male, 17 years old, 60 kg, stab with motor brake handle into the head 12 hours prior to hospital admission after motorbike collision and the patient crushed the bike handlebar and brake handle entered through the patient’s right head. There was history of loss of consciousness for 10 minutes, the patient crushed the bike handlebar and brake handle entered through the patient’s right head. There was history of loss of consciousness for 10 minutes, headache, vomiting, and seizures. Chest, abdomen, and extremities were within normal limits.

Conclusion: Early management target were adequate oxygenation, maintaining proper blood pressure for brain perfusion, avoiding secondary brain injury and identification of mass lesions.

Keywords: brain protection, management, secondary brain injury, foreign body.
Management of myasthenia gravis, blood purification in intensive care unit

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Introduction: Myasthenia gravis (MG) is a neuromuscular disorder primarily characterized by muscle weakness and muscle fatigue. MG is a relatively rare acquired, autoimmune disorder caused by an antibody-mediated blockade of neuromuscular transmission resulting in skeletal muscle weakness.

Case description: We report a case of thirty-two-year-old female who experiencing shortness of breath and limb muscle weakness. The patient previously had undergone caesarean section procedure 1 month ago. The limb weakness starts from upper limbs and descends to the lower limbs. We transfer the patient to the intensive care unit for further monitoring, evaluation and management. We conduct edrophonium (tensilon) test in this patient and showing a positive result, in which the patient is showing mild resolve in limb weakness after administration of neostigmine and atropine sulphate, suggestive for MG. The patient underwent blood purifiction, Therapeutic Plasma Exchange (TPE) in ICU, and showing improvement.

Conclusion: Disease affecting musculoskeletal prompt rapid evaluation and management. Autoimmune (antibody-mediated) disease will benefit to undergo therapeutic plasma exchange (TPE). TPE has dramatically improved the prognosis and outcome in patients with MG. Guilian-Barré syndrome, Goodpasture syndrome and thrombotic thrombocytopenic purpura.

Keywords: myasthenia gravis, tetraparesis, blood purification, therapeutic plasma exchange.

Hypercyanotic “spells” management on Tetralogy of Fallot patient underwent cerebral abscess evacuation

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Introduction: Tetralogy of Fallot (TOF) is a cyanotic congenital heart disease characterised by ventricular septal defect, aortic overriding, right ventricular hypertrophy, and pulmonary stenosis. TOF can cause cerebral abscess caused by cerebrovascular thrombosis or severe arterial hypoxemia. Hypercyanotic spells can occur due to increased oxygen consumption, this triggers a decrease in systemic vascular resistance (SVR) which then aggravates the right to left shunt.

Case description: A 6-year-old female patient with TOF who underwent craniotomy evacuation of a cerebral abscess and had an intraoperative spell, the patient assessed with ASA 3, decreased in GCS E3V4M5, convulsions, absent of limb weakness, congenital heart disease (VSD), cyanosis, spasms, clubbing fingers, saturation 92-95%, the patient has never undergone any surgical procedure to close a defect in the heart, patients also with polycythemia and thrombocytosis.

Conclusion: Anesthesia management included giving 100% oxygen, keeping the patient in a euovolemic condition, keeping the patient from being hypothermic, keeping the patient from being hypercarbia and hypoxia, then giving phenylephrine at a dose of 5-10 mcg/kgBW i.v bolus, then maintained by 2-5 mcg/kg per minute, after surgery the patient was treated at pediatric intensive care unit (PICU) with stable hemodynamic.

Keywords: hypercyanotic, Tetralogy of Fallot, cerebral abscess, management.

Management anaesthesia for hydrocele with haemophilia

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Introduction: Hydrocele is an excessive buildup of fluid between the parietal layer and visceral tunica vaginalis that must be treated with surgery. Surgery in patients with haemophilia is a challenging condition. This case report tells us about patient with haemophilia who underwent radical orchidectomy.

Case description: A 28-year-old man presents with enlargement in scrotum since 7 days before admitted hospital. Palpation in scrotum which is hydrocele feels fluctuating and is relatively springy or soft depending on voltage inside the hydrocele. Hydrocele felt something oval or round, soft, bounded firm and not tender. Positive translumination examination. He was also diagnosed with type hemophilia where elongated aPTT is obtained, whereas PT, TT, bleeding time, platelet count, and function are normal. He is given antihemophilic factors before undergoing radical orchidectomy. Surgery is finished with the controlled bleeding condition.

Conclusion: Handling anaesthesia in haemophilia patients needs to consider type of surgery. The first thing that is important to do in patients with hematologic disorders is an excellent preoperative evaluation from the anesthesiologist, surgical and haematologist team to prevent complications that can occur intraoperatively. Investigations are carried out according to the needs and types of operations. Provision of factor VIII must adjust the type of surgery. Factor VIII must be added as much as possible to near normal count (100%). Factor VIII has a half-life around 12 hours in adults so a repeat infusion is needed every 8-12 hours to maintain factor VIII levels above 50%.

Keywords: haemophilia, factor VII, hydrocele, radical orchidectomy.

Management anaesthesia for patient with rhabdomyosarcoma

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Introduction: Rhabdomyosarcoma (RMS) is a type of soft connective tissue tumor that can grow in almost the entire body, except bones. The location of most tumors is in the head and neck, this causes difficulties in the management of anesthesia in surgery. This case report reports on patients with RMS who were operated on with TCI anesthesia.

Keywords: Rhabdomyosarcoma, surgery, TCI anesthesia.
Case description: 51-year-old man complained of a lump that initially was small but grew larger over the last six months. The patient complained of appetite and body weight decreased by 10 kg within six months. Physical examination showed pale inferior conjunctiva and a lump in the neck with a size of 6 x 6 cm immobile. CT scan and fine needle aspiration biopsy (FNAB) examination direct the diagnosis of rhabdomyosarcoma. The patient underwent surgery with targeted control infusion anaesthesia.

Conclusion: Patients with a large mass in the neck often hamper surgery. This can occur due to disruption in the process of guarding the airway and the operating field of view that must be positioned in such a way. Intravenous anaesthesia technique is an anaesthetic technique by inserting drugs directly into the blood vessels in a parenteral way, these drugs are used for premedication such as diazepam and narcotic analgesics. Intravenous anaesthesia technique is an anaesthetic technique by inserting drugs directly into the blood vessels parenterally, these drugs are used for premedication such as diazepam and narcotic analgesics. This will make it easier to position the patient and increase the depth of anaesthesia.

Keywords: rhabdomyosarcoma, targeted control infusion anesthesia, management.

Anaesthesia management for chronic kidney disease patient with pulmonary hypertension

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Introduction: Cardiovascular disease is one of the most cause of death in the world. Heart problems will aggravate the patient’s condition when undergoing various noncardiac operations. The other problem, failure of kidney function also triggers hemodynamic instability. Patients with heart and kidney problems, who undergo elective surgery, is a complex case that requires great attention by the anesthesiologist.

Case description: we found a 42-year-old woman, diagnosed with umbilical hernia, had a history of chronic kidney failure 3 years ago with regular hemodialysis therapy. Laboratory results show urea: 94 mmol /l, creatinine: 7.39 mmol /l with an estimated GFR of 7.2 ml/min/1.73 m². She has history of hypertension since 3 years ago. Echo showed Left ventricle (LV) ejection fraction 48% and right ventricle (RV) (TAPSE: 1.7 cm) systolic function decreased, LV diastolic dysfunction was impaired compliance, severe tricuspid regurgitation, pulmonal regurgitation mild, moderate pulmonary hypertension, moderate mitral regurgitation. Patient will undergo elective herniorrhaphy surgery. Regional anaesthesia (epidural) is the best approach for this patient. Blockade of pain after epidural placement can prevent increased pulmonary vascular resistance (PVR). Adequate oxygen supplementation, measurable fluid administration and the addition of vasoconstrictor agents can help maintain hemodynamic stability so that the risk of hypotension due to local anaesthesia can be minimised.

Conclusion: Epidural technique has good contribution. Providing the right amount of isotonic fluid, preventing hypoxia and adding vasoconstrictor agents help maintain intraoperative hemodynamic stability.

Keywords: anaesthesia, kidney failure, epidural, chronic kidney disease, pulmonary hypertension.

Frontal lobe syndrome after traumatic brain injury: a case report

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Introduction: Traumatic brain injury (TBI) is an external mechanical force on the brain and cause temporary or permanent dysfunction. Majority of survivors of moderate to severe TBI have chronic neurobehavioral sequelae. Frontal lobe syndrome (FLS) is a classic example characterised by irritability, apathy, euphoria, disinhibition, inappropriate, and altered sexual behaviour.

Case description: 20-year-old male presented Emergency Department with loss of consciousness after head injury by motorcycle accident 2 hours before admission. On examination, he was unconscious, GCS E3M5V3 with aggressiveness, verbal and physical aggression. His Head CT Scan showed a haemorrhage in left frontal lobe and parietal lobe. He was treated by neurologist as an inpatient in High Care Unit with Citicoline 500 mg, Paracetamol 1000 mg, Phenytoin 100 mg and Haloperidol 1 mg. After 3 weeks of hospitalized the aggressiveness is decreased, but he started to exhibit poor self-care, disinhibition, irrelevant talk, easily irritable, increased psychomotor activity, inappropriate affect and suspiciousness toward family members. There is no history for any physical or psychiatric illness.

Conclusion: FLS after traumatic brain injury has been reported in many ways over the years. The clinical approach of diseases causing FLS has made some progress in recent years. Imaging techniques like Head CT Scan, have improved the diagnostic process and made the identification of neurological disorders easier and more precise. Pharmacological interventions are limited and no disease-modifying treatment is currently available, nonpharmacological interventions may provide a means to decrease symptom severity as well as caregiver burden depending on the affected cognitive domains.

Keywords: frontal lobe syndrome, traumatic brain injury, cognitive impairment.
Coordination medical team for emergency response

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Introduction: The purpose of this presentation is to socialize the Emergency Medical Teams of the Indonesian Doctors Association - the IDI Executive Board and ask for input to strengthen the IDI EMT towards global/regional engagement. IDI Emergency Medical Team is a team under the auspices of the Indonesian Doctors Association that is dedicated to disaster mitigation & response efforts such as disaster/handicap crisis response, active mitigation within the framework of efforts to reduce disaster risk/DRR (Disaster Risk Reduction). EMT IDI is a place for every Branch & Regional IDI that has been playing an active role in disaster mitigation & Response. All IDI members who have an interest and ability to play an active role in disaster mitigation & response activities can become members of the IDI EMT.

Methods: In an effort to make a disaster response, EMT IDI played a role in the pre-hospital area, which included the handling of disaster victims, Rapid Health Assessment, activation/support of Health Clusters. Medical assistance, Communicator & Advocacy & Coaching System. EMT IDI also provides support in the form of MOBILE and FIXED (Type-1 EMT). Besides that, EMT IDI can also carry out supporting type-2 EMT at referral services including hospitals.

Result: In implementing disaster mitigation & response efforts, PB IDI coordinates with Cross-Sector, Stakeholders, especially the National Disaster Management Agency and the Ministry of Health and Health Office, in collaboration with the Regional IDI involving the Branch IDI.

Conclusion: During a disaster, the response in the initial phase is carried out by the nearest EMT IDI Branch which will be strengthened by the IDI EMT Region and PB IDI EMT. EMT IDI members are competent to make efforts in basic medical emergencies based on IDI Disaster Management standards. Referring to WHO directives, it is necessary to strengthen integration and structuring professional organizations, which are some things that must be done: (1) EMT Capacity Strengthening, Capacity & Training. (2) Timely activation, Coordination of EMT, (3) Clinical, Technical, Operational Minimum Standard and Best Practice, (4) Quality Assurance, Classification, (5) Global/Regional Commitment & Partnership

Keywords: emergency response, disaster management, protocols.

Mycobacterium tuberculosis strains infection caused different level of apoptosis macrophage cells derived from pulmonary tuberculosis patients in Indonesia

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Introduction: Mycobacterium tuberculosis (MTB) is the causative agent of human tuberculosis and facultative intracellular pathogen of macrophage cells. Apoptosis macrophage plays a critical role for the host defence to resist MTB infection. The Beijing strain of MTB is regarded as “hypervirulent” due to its ability to inhibit apoptosis macrophage, expand the infection and disease of tuberculosis.

Methods: Active pulmonary tuberculosis patients were diagnosed based on AFB sputum smear, gene Xpert MTB/RIF, and chest X-ray. Bronchoalveolar-lavage was performed to specify specimens and identify MTB strain using RD9 and TbD1 primers by PCR methods, respectively. Detection of MTB strain by genome sequencing and DNA homology analysis can lie performed with BLAST programs. Apoptosis level was measured by TUNEL assay methods.

Results: MTB strain were detected in all patients in which 24 and 6 isolates and classified as the hypervirulent homologous of Beijing strains and 6 isolates of the Mycobacterium bovis BCG homologous strain, respectively. Apoptosis level detected decrease in macrophage cells derived from patients with hypervirulent homologous of Beijing strains infection compared with Mycobacterium bovis strain infection (p <0.05)

Conclusion: A homologous Beijing strain and Mycobacterium bovis strain were detected among pulmonary TB patients in Indonesia. A hypervirulent strain infections have a great ability to inhibit apoptosis of macrophage cells in human. Therefore, laboratory test to determine MTB strains should be integrated in National Tuberculosis Control Program in the country.

Keywords: pulmonary tuberculosis, MTB strain, bronchoalveolar lavage, apoptosis macrophage

The effectiveness of dextrose prolotherapy on functional outcome in frozen shoulder patients in the pain clinic of Dr. Zainoel Abidin General Hospital

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Introduction: Frozen shoulder is a severe shoulder pain condition that persists more than 3 months and accompanied by gradually progressive stiffness. Its incidence is 2-5% in general population. Dextrose prolotherapy is a regenerative injection therapy that can initiate inflammation, increase proliferation of fibroblast and induce collagen tissue synthesis and tissue healing, in order to improve functional outcomes. This study aimed to assess the effectiveness of dextrose prolotherapy on functional outcome of patients with a frozen shoulder in the pain clinic of Zainoel Abidin General Hospital, Banda Aceh.

Methods: This study used one group pretest and posttest design. A non-probability sampling was used with a total sample of 40 patients. Data were
Results: There was a significant relationship between before and after dextrose prolotherapy procedures on the functional outcome of patients with frozen shoulder where the mean of NRS before prolotherapy was 7.3±1.7 and after prolotherapy was 2.7±1.4 (p=0.000), the mean of SPADI score before prolotherapy was 60.6±21.4 and after prolotherapy was 29.1±8.9 (p=0.000). The mean of range of motion before prolotherapy was 91.7°±31.4° of elevation, 76.7°±24.2° of abduction, 3.8°±5.7° of adduction, 31.7°±25.8° of internal rotation, 53.5°±22.9° of external rotation and the mean range of motion after prolotherapy was 120.8°±28.1° of elevation, 105.0°±25.4° of abduction, 12.9°± 8.4° of adduction, 44.7°±22.8° of internal rotation, 70.0°±20.0° of external rotation, with all p values < 0.005.

Conclusion: Dextrose prolotherapy is significantly effective in improving the functional outcome of shoulder pain patients in pain clinic of Zainoel Abidin General Hospital, Banda Aceh.

Keywords: frozen shoulder, prolotherapy, functional outcome, NRS, SPADI, ROM.

Profile of patients liver abscess at Dr. Zainoel Abidin General Hospital in 2016-2017

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Introduction: Liver abscess is a health and social problem in several developing countries. High prevalence is usually associated with poor sanitation, low economic status and poor nutrition. These liver abscesses are spread throughout the world, and most are amebic abscesses in the tropics with poor sanitary conditions. Epidemiologically, in the United States, it was found that 3.6 per 100,000 population from 1995-2005 suffered from liver abscesses that required hospital treatment. Liver abscesses are more common in men than women in the ratio of 3: 1 to 22: 1, with an age range of 20-50 years. There is no incidence of specific racial differences in liver abscesses. In Dr. Zainoel Abidin General Hospital in Banda Aceh there is no data on the number of previous cases of liver abscess.

Methods: Retrospective descriptive research exploring secondary data and will be reported through distribution based on sex, age, type of surgery and type of liver abscess.

Results: During 2016-2017 there were 33 liver abscess patients, 30 men (90%) and 3 women (10%). The highest frequency of respondents based on age is at risk, namely the age of 46-55 years as many as 13 people (30%). The highest frequency of action was percutaneous abscess drainage by 15 people (45%).

Conclusion: Based on this study it was found that the highest cases in patients with liver abscess are male patients and the age at high risk of liver abscess is 46-55 years. Based on this study, it was found that the action most often performed on patients with liver abscess in Dr. Zainoel Abidin General Hospital in Banda Aceh is percutaneous abscess drainage with the most type of abscess being pyogenic abscess.

Keywords: liver abscess, pyogenic abscess, characteristics, management.

Alvarado score diagnostic test for diagnostic of acute apendisitis in Dr. Zainoel Abidin Hospital period 2017

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Introduction: Appendicitis is one of the most common surgical cases in the emergency room that requires prompt treatment. Rapid and precise diagnosis can reduce complications that may occur. One effort to diagnose acute appendicitis easily and quickly is by using the Alvarado score

Method: This research is a diagnostic test, with cross sectional design and the results of anatomic pathology examination as a gold standard. Data collection was obtained from the medical record data of 51 patients who had been operated on at the Dr. Zainoel Abidin hospital in 2017. The data is then grouped into two groups according to the Alvarado score results and analyzed using the SPSS program using diagnostic testing calculation.

Results: Fifty-one acute appendicitis patients, there were 30 males and 21 females. Alvarado scores diagnostic test values in this study obtained a sensitivity of 72.2%, specificity of 66.7%, positive predictive value of 83.9%, negative predictive value of 50%.

Conclusion: Although, Alvarado score provides measurably useful diagnostic information in evaluating children with suspected appendicitis, we found that good clinical judgment remains the mainstay of correct diagnosis of appendicitis.

Keywords: acute appendicitis, Alvarado score, diagnostic test, anatomical pathology examination.

Profile of thyroid nodule patients in general hospital Dr. Zainoel Abidin Hospital, Banda Aceh during 2017

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Introduction: Thyroid nodules are a common clinical condition. Malignancy can occur in 5-15% of nodules depending on age, sex and other factors. Based on this, researchers are interested in knowing the profile of outpatients and inpatients thyroid nodules at General Hospital of Dr. Zainoel Abidin Banda Aceh.

Methods: This research is a descriptive observational study with cross sectional approach in outpatient and inpatient thyroid nodule patients during 2017 at the General Hospital of Dr. Zainoel Abidin Banda Aceh. The data of this study were collected by technique of reading medical records.

Results: There were 113 samples of patients with the most characteristics were age of 35-45 years were 54 patients (47.8%) and the most were women for 66 patients (58.41%). Based on demographics, there were most 20 patients (17.70%) originating from Central Aceh. Based on nodule size, more size was
<5 cm obtained by 67 patients (59.2%), whereas based on nodule position, it was found that there were more solitary, 59 patients (52.2%).

**Conclusion:** The age of the most respondents of the study was 35-45 years and women, originating from the mountains with nodules <5 cm in size and solitary.

**Keywords:** thyroid nodules, age, sex, demographics, morphology.

**Profile and outcome: gastroschisis patients at Dr. Zainoel Abidin General Hospital, Banda Aceh-Indonesia**

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**Introduction:** Gastroschisis is a congenital abnormal defect of abdominal wall with extrusion of the intestine and other abdominal organs outside the abdominal wall without membrane. Occurs in 3-3.7 cases of 10,000 births. Survival rates are reported 90-95% of surgical and intensive care centers. Dr. Zainoel Abidin General Hospital is a referral center that capable handling these disorders. Until now there’s none report about outcome gastroschisis patients.

**Methods:** Using total sampling and retrospectively data are taken from medical records of infant gastroschisis patients from 1 January 2010 to 30 December 2016 at RSUDZA. Data received include sex, birth weight, first 24 hours survival rates are reported 90-95% of surgical and intensive care centers. Dr. Zainoel Abidin General Hospital is a referral center that capable handling these disorders. Until now there’s none report about outcome gastroschisis patients.

**Results:** There were 20 infants with gastroschisis, 17 patients or 85% of infants referred to pediatric surgeon consultation after > 6 hours and were referral patients from outside RSUDZA. 75% have low birth weight. 14 infants (70%) had a survival> 24 hours. 55% of infants had low birth weight (LBW) + sepsis. Infants with survival >24 hours had a treatment length of up to 85.21 hours (SD ± 86.837) longer than infants who died <24 hours with mean time of death was 21.5 hours (SD ± 1.643).

**Conclusion:** The survival rate of gastroschisis patient > 24 hours is quite high.

**Keywords:** gastroschisis, low birth weight, sepsis, characteristics.

**Profile of intussusception patients in Dr. Zainoel Abidin Hospital period 2017-2018**

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**Introduction:** Intussusception is one of the most common emergencies in children. Intussusception is the process by which a proximal segment of the intestine enters the distal lumen of the intestine, causing intestinal obstruction and can end with strangulation. Delayed diagnosis that continues to intestinal necrosis will increase morbidity and mortality. This study aims to determine the profile of Intussusception patients in Zainoel Abidin Regional Hospital Banda Aceh for the period 2017-2018

**Methods:** Descriptive study conducted during the period of 1 January 2017 to 31 December 2018 of all patients with a diagnosis of Intussusception and had fulfilled the inclusion and exclusion criteria at the Zainoel Abidin Hospital in Banda Aceh.

**Results:** A total of 20 patients with a diagnosis of Intussusception in this study, with the distribution according to the most age less than 5 months as many as 11 (55%) the age of the highest patients undergoing surgery was 2 years, the most male sex was 14 (70%), live in Banda Aceh and Aceh Tamiang with 3 patients (15%), with the highest number of Intussusception 13 (65%) being the ileocolica type. Most types of surgery are Laparatomi + milking 14 cases (70%).

**Conclusion:** The population of intussusception in Zainoel Abidin Hospital in Banda Aceh was dominated by male patients with the most age less than 5 months. The most type of Intussusception is ileocolica with the type of surgery laparotomy + milking surgery

**Keywords:** intussusception, profile of patients, management, epidemiology.

**Microbial pattern profile in burn at surgery ward Dr. Zainoel Abidin General Hospital, Banda Aceh-Indonesia**

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**Introduction:** Burns is a major cause of accidents and deaths that occur in the United States and throughout the world. Patients with burns more than 20 percent of the body surface have a higher risk for invasive infections, also called sepsis burns, which often causes multiorgan dysfunction and death. In addition to the nature and degree of thermal damage that affects infection, the type and number of microorganisms that invade burns also influences the risk of infection.

**Methods:** The purpose of this study is to study the pattern description in burn patients and also determine the choice of antibiotics in patients with burns at Zainoel Abidin Hospital in Banda Aceh. This research is a quantitative descriptive study conducted in the Operating Room of the General Hospital Zainoel Abidin Banda Aceh with a study period of 1 January 2018 to 30 April 2018. The research sample uses total sampling. Data analysis uses univariate.

**Results:** The results of this study were 14 patients with 64% male and 36% female during the study. The pattern of germs obtained from all patients was *Pseudomonas aeruginosa* by 50%, *Acinetobacter baumannii* by 36%, and *Staphylococcus aureus* by 14%. The results of antibiotic resistance tests of patients with burns in the surgical operating room of the Dr. Zainoel Abidin General Hospital, believe that amikacin has the lowest resistance level of 42.9% followed by other aminoglycoside antibiotics.

**Conclusion:** From all burn patients, male is more than female, which Pseudomonas aeruginosa is most common bacteria.

**Keywords:** burns, antibiotics, bacteria, surveillance.
Reliability of ultrasonography examination in the enforcement of diagnosis of appendicitis at Dr. Zainoel Abidin General Hospital Banda Aceh in 2017

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Introduction: Appendicitis is an inflammation of the inner lining of the vermiform appendix that spreads to other parts. Despite the progress of diagnostic and therapeutic appendicitis rapidly developing, however, Appendicitis is a clinical emergency and is one of the most common causes of acute abdominal pain in adult patients referred to the emergency department. Ultrasound examination is a diagnostic imaging technique that uses ultra-frequent sound to see internal organs. Ultrasonography is a frequent radiological examination used for acute appendicitis. The gold standard for the diagnosis of appendicitis still uses pathological confirmation after appendectomy.

Methods: This research is observational analytic study. The approach in this research is cross-sectional study, data collected from medical record. This research was conducted in Dr. Zainoel Abidin General Hospital Banda Aceh. We chose the location because of the many uses of ultrasound in the diagnosis of appendicitis in this hospital. Data collection was conducted in 2017.

Results: Sensitivity of ultrasonography for appendicitis was 87.5%, specificity was 38.8%, positive prediction score was 79.2%, negative prediction score was 58.3%, with diagnostic accuracy was 74.2%.

Conclusion: Ultrasonography examination is still reliable in diagnosis of appendicitis that can be proven with Chi-square diagnostic test result and sensitivity value obtained.

Keywords: appendicitis, appendix, ultrasonography, sensitivity, accuracy.

Description of external genitalia reconstruction in surgical patients at Dr. Zainoel Abidin General Hospital Banda Aceh period September 2017 to August 2018

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Introduction: Defects in the external genitalia region can be caused by various events. Reconstruction of the area is needed not only for aesthetic appearance but also for functional and psychological reasons. Surgical techniques for reconstructive actions vary greatly covering defects such as primary closure, local tissue flaps, full-thickness skin grafts (FTSG), and split-thickness skin grafts (STSG) with the aim of achieving a stable and aesthetic cover. The purpose of this study was to determine the description of external genitalia reconstruction in surgical patients.

Methods: This research is a descriptive study with a retrospective approach carried out on surgical patients at the General Hospital of Dr. Zainoel Abidin Banda Aceh was handled by hospitalization in the 2017-2018 period. The sample amounted to 16 respondents who will be analysed using the frequency distribution table.

Results: From the results of the study found 100.0% male sex, the age of patients in the age group 55 years and over 37.5%, the type of driver work as much as 31.25%, the disease caused by infection as much as 100.0% and action a definite unilateral pudendal thigh flap operation of 68.75%.

Conclusion: From the overall it can be concluded that the majority of male sex, the highest age in the age group 55 years and above, the type of most driver work, the cause of disease due to the most infection and the most definitive unilateral pudendal thigh flap.

Keywords: Genitalia externa, defect, skin graft, gender, age, occupation, causative disease, definitive surgery.

Association of body shape index score overview on burn patient’s outcome at Dr. Zainoel Abidin Hospital, Banda Aceh in 2016

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Introduction: Burns is still a problem in the world of health that can cause disability or death. The pathophysiology of burns begins with the transfer of energy from heat sources to the body. The body’s cells can withstand heat with temperatures up to 44 degrees Celsius without experiencing significant damage, but the speed of tissue damage will double for each degree of temperature rise above the threshold temperature. Neural networks and blood vessel networks are the structures that are most susceptible to heat. Damage to the blood vessels will cause intravascular fluid along with plasma proteins and electrolytes out of the lumen of the blood vessels to the interstitial space to form edema bubbles or bullae. In extensive burns, the process occurs almost completely so that there is accumulation of tissue in a large interstitial, which causes the body to experience hypovolemic conditions as a result the body will experience shock. Continual shock can cause multi-organ failure which can result in death. This study aims to see a description of abbreviated burn severity index (ABSI) scores in burn patients.

Methods: The sample of this research was 40 people. The study was conducted at the Emergency Department during 2016.

Result: ABSI score from the demographic shows a mild severity of 22 people (55%), 12 people (30%), and a high 6 people (15%).

Conclusion: The severity of burns used the classification ABSI based on burn area. Demographic results show female patients who experienced burns as many as 14 people and as many as 26 people men while the age range that most suffered burns at the age of 21 to 40 years is 17 people.

Keywords: burns, ABSI Score.
Germ and resistance patterns in operating wound infection patients (ILO) post craniotomy in Dr. Zainoel Abidin General Hospital Banda Aceh 2018

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Introduction: Infectious disease is a major problem increasing morbidity and mortality throughout the world including Indonesia. Data from the WHO total nosocomial infections originating from surgical site infections ranged from 5-34%. The survey from the CDC also mentioned there were 157,500 incidences of surgical wound infections in the world in 2011. Craniotomy is a surgical procedure by opening the skull bones to provide direct access to brain. Based on the high number of surgery at RSUDZA and the presence of surgical wound infections in some patients, this makes researchers interested in knowing the pattern of germs and resistance to the occurrence of post craniotomy surgical wound infections at the General Hospital Dr. Zainoel Abidin Banda Aceh.

Methods: This study used a descriptive design with a retrospective approach to the pattern of germs and resistance in the post-craniotherapy ILO at the General Hospital dr. Zainoel Abidin Banda Aceh.

Results: The pattern of germs that cause post-operative craniotomy (ILO) infection in RSUD Dr. Zainoel Abidin from January to December 2018 are Staphylococcus aureus (26.07%), Pseudomonas aeroginos (21.74%), Klebsiella pneumoniae (17.39%), Escherichia coli (13.04%), Acinetobacter baumanni (8.70%), Proteus mirabilis (8.70%), Providencia stuartii (2.18%), and Staphylococcus epidermidis (2.18%). The pattern of germ resistance in the post-craniotherapy ILO in Dr. Zainoel Abidin from January to December 2018 showed that the percentage of resistance to Staphylococcus aureus was resistant to penicillin G antibiotics (100%), gentamicin (41.67%), ciprofloxacin (41.67%), and ceftriaxone (50%), while Pseudomonas aeroginosa have high resistance to antibiotics ampicillin (100%), ciprofloxacin (100%), gentamicin (70%), ceftriaxone (70%) and cefazolin (70%).

Conclusion: Germs are the most common cause of post operative craniotomy (ILO) infection in Dr. Zainoel Abidin from January to December 2018 is Staphylococcus aureus (26.07%), and almost all germs are resistant to ampicillin (100%).

Keywords: germs, resistance patterns, surveillance, craniotomy.

The urgency of surgical skill competence in the management of Palu earthquake victims 2018

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Introduction: Palu, the capital of Central Sulawesi Province in Indonesia, was the area severely affected by 7.5 magnitude of earthquake followed by tsunami and liquefaction on September 28, 2018. The volume of surgery activity for disaster victims is significant because disasters often cause a broad spectrum of injuries. In particular, earthquakes cause limb injuries most commonly (60% of all injuries). Following acute trauma management, medical doctor especially surgeon should be involved in assessing and treating injuries. Medical doctor who is interested in participating in the response to disaster relief should improve both mortality and morbidity following a disaster, so the competence in emergency surgical care in disaster situations is a must.

Method: This paper is a descriptive study with a cross-sectional approach. The samples were collected from 2 hospitals: Undata Palu Hospital and Anuta Pura Hospital. The samples were the medical records of the patient from palu earthquake victims in 2018.

Results: We collected 220 samples. Diagnoses for injured patients: fracture/ dislocation 78 (35.5%), open wound 49 (22.3%), crush injury 30 (13.5%), Head/Face/Brain injury 25 (11.4%), wound infections/abscess 22 (10%), and other 16 (7.3%). Surgical procedures for injured patients: fixation 79 (35.9%), debridement 46 (20.9%), amputation 20 (9.1%), wound toilet 7 (3.2%), healing 16 (7.3%), craniotomy 14 (6.4%), immobilization 12 (5.5%), water sealed drainage 9 (4.1%), rest-ice-compression-elevation 6 (2.7%) and Other 11 (5%).

Conclusion: Following earthquakes, soft-tissue and fracture injuries are the most common morbidity and the most common surgical procedures are orthopaedic operation and wound debridement. For better preparedness, surgeon must be the front line. For medical doctor who wants to participate must have surgery competence in disaster setting and it should be a part of the surgery training especially in orthopaedic and plastic surgery skill.

Keywords: earthquake, surgical skill, medical doctor, surgeon.

Profile of atresia esofagus in Regional General Hospital Dr. Zainoel Abidin period 2015 – 2016, Banda Aceh-Indonesia

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Introduction: Esophageal atresia is an abnormality in the oesophagus that is characterised by not connecting the proximal oesophagus with the distal oesophagus. The incidence of esophagus varies greatly. Generally, more than 90% of oesophageal atresia is associated with tracheoesophageal fistula and other anomalies. The main purpose of this study was to determine the profile of oesophageal atresia at the Regional General Hospital, Dr. Zainoel Abidin Banda Aceh from 2015 to 2016.

Method: This research is a retrospective descriptive study that collects data using patient medical records.

Results: Most patients with oesophageal atresia period 2015-2016 at the Regional General Hospital dr. Zainoel Abidin Banda Aceh is female (n = 11)
with a ratio of 3.66: 1 rounded to 4: 1. The frequency of oesophageal atresia and tracheoesophageal fistula varies greatly from year to year. The combination of the two anomalies ranges from 1 in 3,000 to 1 in 4,500 births. As many as 50 to 70% of patients with oesophageal atresia have other anomalies, such as cardiovascular anomalies (35%), genitourinary (24%), gastrointestinal (24%), neurology (12%), musculoskeletal (20%), VACTERL (20%).

Conclusion: The results of this study were patients with oesophageal atresia in Banda Aceh Hospital in the 2015-2016 period, amounting to 14 people, where most patients came to the hospital at the age of 1 (50%). Female sex is more dominant than male with a ratio of 4: 1. A total of 13 patients (92.9%) are oesophageal atresia with distal tracheo-oesophageal fistula (Type C) and one patient (7.1%) is atresia without fistula (Type A).

Keywords: oesophageal atresia, age, sex, classification.

Overview of choledocholithiasis patients undergone surgery At Dr. Zainoel Abidin Hospital Banda Aceh period 2016-2017

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Introduction: Gallstone is one of common medical problems. In some studies, it was affecting 20% of general population. In up 20% of its cases were related to choledocholithiasis. Choledocholithiasis is the presence of gallstone in common bile duct and its clinical presentation might vary widely from asymptomatic to sepsis. There was lack of data about choledocholithiasis in Dr. Zainoel Abidin Banda Aceh. This was overview of patient with choledocholithiasis undergone surgery at dr. Zainoel Abidin Hospital Banda Aceh in 2016 until 2017.

Method: A descriptive retrospective study was performed in November 2018. Patient characteristic, surgical procedure, laboratory result, radiology result and patient outcome werecollected. All data describe descriptively.

Result: During 2016 until 2017 period, there was 334 patient undergone biliary surgery and 77.2% of it had undergone gallstone surgery. About 78 patient (30.23%) with gallstone was choledocholithiasis. Based on patient characteristic, choledocholithiasis was higher in women (56.25%). Most patients came with symptoms right upper abdominal pain, nausea and vomit. Most patients had cholelithiasis and dilated CBD in radiological finding. About 76.5% patient had anaemia and 43.75% had leucocytosis. All patient had elevated liver enzyme, total bilirubin, and direct bilirubin. Hypoalbuninemia was found in 70.31% patients. All patient underwent laparotomy, cholecystectomy, CBD explores, IOC, and T tube insertion. Bypass biliodigestive were performed on 6.25% patients. Length of hospital stay was 6.31 days. About 75% patient had good outcome. Mortality related to sepsis with multiple organ failure (88.75%), cardiopulmonary (20.31%), and pneumoniae (10.94%).

Conclusion: There was similarity of choledocholithiasis overview in Zainoel Abidin Hospital with others. There was no Endoscopic Retrograde Cholangiopancreatography (ERCP) facility in Banda Aceh.

Keys: gallstone, choledocholithiasis, common bile duct, zainoel abidin hospital.

Profile of polytrauma patients following with orthopaedic injury in Dr. Zainoel Abidin General Hospital, Banda Aceh-Indonesia

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Introduction: Polytrauma is a major cause of morbidity and mortality in both developed and developing countries. Many of these injuries could lead to surgical and medical complications. Orthopaedic injuries in polytraumatised patient are common and affect the management in such patients.

Method: Polytrauma patients (injury severity score ≥16) with orthopaedic injuries that are transported to and treated in our institute during a period of 3 months were retrospectively analysed. Data was collected related to age, sex, mechanism of injury, pattern of orthopaedic injuries, associated injuries and hospital length stay.

Results: Between July and September 2019, 183 was diagnosed as in-patient polytrauma followed by orthopaedic injuries with a mean age of 32.14 (SD: 8.23) years, male 120 (66.25%) and female 63 (33.75%). Mechanism of injury shows motor vehicle collisions 139 (76.2%) as the main cause of injury, fall 27 (14.9%), gunshot 11 (6.6%) and assault 6 (2.3%). Pattern of orthopaedic injuries include open fracture of upper extremities 16 (8.7%), closed fracture of upper extremities 48 (26.5%), open fracture of lower extremities 20 (11.0%), closed fracture of lower extremities 80 (43.7%), dislocation of upper extremities 4 (2.5%), dislocation of lower extremities 10 (5.8%), and spinal cord injury 5 (1.8%). Associated injury are maxillofacial trauma 8 (2.5%) penetrating abdominal trauma 3 (1.7%), blunt abdominal trauma 21 (11.6%), penetrating thoracic trauma 5 (3.3%), blunt thoracic trauma 16 (9.9%), mild head trauma 69 (37.7%), moderate head trauma 56 (30.6%), and severe head trauma 5 (2.7%). About 135 (73.7%) samples are treated <10 days.

Conclusion: The most mechanism of injury in this study is motor vehicle collisions with closed fracture of lower extremities as the following orthopaedic injuries and mild head trauma as an associated injury.

Keys: profile, polytrauma, orthopaedic injuries, characteristics.

Lower extremity amputation characteristic in Dr. Zainoel Abidin General Hospital Banda Aceh from January-December 2016

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Introduction: Lower extremity amputation has different etiologies and the frequency of lower extremity amputation getting higher over time. The purpose of the study was to describe the demographic, etiologies and characteristic of lower extremity amputation.

Method: We performed retrospective and descriptive study. From January to December 2016, lower-extremity amputation identified in the entire population.
of total amputation was performed. The patient evaluated with respect to age, gender, aetiology and amputations level.

Results: During the study, 132 patients were performed amputation with lower extremity amputation at 110 patients(83%) on 72 men (65%) and 38 women (35%). The highest incidence at the age of 46-65 years (52%), and the second was 25-45 years (30%). Peripheral vascular disease was the most frequent cause in 79 patients (69%), and followed by trauma in 18 patients (16%). 33 Toe amputation (30%) and 31 below-knee amputation (28%) was the most frequent amputation performed.

Conclusion: Lower extremity amputation much more frequent than upper extremity amputation with peripheral vascular disease was the leading cause in Dr. Zainoel Abidin General Hospital in elderly was most prevalent.

Keywords: amputation, lower extremity, surgery, management.

Health data profile in the earthquake emergency response phase in Lombok; experience in Indonesia

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Introduction: 5 August 2018 at 19.46 WITA there was a great earthquake that struck the Island of Lombok with the magnitude of 7 on the Richter Scale. This earthquake was centered in the border area of North Lombok Regency and East Lombok Regency. Located between North Lombok, East Lombok, West Lombok, Central Lombok, Mataram City, Sumbawa and West Sumbawa. Health prevention efforts undertaken are re-functioning of Primary Health Centers and hospitals that have collapsed, supporting health consisting of PHBS, trauma healing activities, vector control, data processing and health information related to earthquakes, making toilet and distributing clean water.

Method: This research uses descriptive research method, which is by direct observation at the Lombok disaster location. The thing to do is to directly organize all activities in the health cluster in North Lombok. Make regular meetings with healthy volunteers to evaluate daily activities in the affected area.

Result: Found data of disaster victims with the most severe injuries in the North Lombok area of 1360 people, minor injuries in the area of Mataram as many as 6358 people, died the most in North Lombok as many as 467 people, and the most refugees in West Lombok were 116,453 people.

Conclusion: Profile of health data related to the Lombok earthquake is very important for the government to be able to make policies and decisions related to the status of the earthquake disaster in Lombok. Accurate data can produce recommendations later on about disaster risk reduction efforts.

Keywords: health cluster, natural disaster, emergency response phase.

Profile patients with cleft lip and palate in Cleft Lip and Palate Center Aceh Malahayati Hospital year 2016-2017

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Introduction: Cleft lip/palate (CLP) is cleft in lip and palate happened in first trimester of pregnancy. There is no data of incidence CLP in Indonesia. This study could little help to determine prevalence of CLP in Indonesia.

Methods: Descriptive study was done in period 1st January 2016 until 31st December 2016 to all patients in cleft lip and palate who done operative in Malahayati Hospital Banda Aceh.

Results: Total patients participant in this study is 556 patients, with dominant age <5 years old which is 385 patients. Patients were dominated with male which 315 patients (56.65%) and the rest is female which is 241 patients (43.35%). Most diagnosed patients are complete unilateral cleft lip which is 280 patients (50.4%), followed by complete bilateral and incomplete unilateral, respectively 219 patients (39.4%) and 57 patients (10.3%).

Conclusion: We got summary of CLP case from January 2016 to December 2017 is 556 patients. Patients dominated by male 315 patients and followed by female 241 patients, with dominant age is <5 years old which is 385 patients (69.24%).

Keywords: cleft lip, center palate, characteristics.

Description of bone mineral density and sex of osteoporosis patient in Orthopedic Outpatient Clinic, Dr. Zainoel Abidin General Hospital, Banda Aceh-Indonesia

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Introduction: Osteoporosis or known as porous bone is a condition of decreased bone density and microarchitecture disorders that cause bones become brittle and easy to fracture. Factors that affect osteoporosis include age and sex. According to WHO there are about 200 million people who have osteoporosis worldwide and by 2050 estimated hip fracture rate will increase 2-fold in women and 3 times in men. One in three women in the world is at risk for osteoporotic fractures and is estimated to increase every three seconds. Osteoporosis is still a major health problem in some countries, especially in developing countries. The condition is related to the economic burden it produces. Women are known to experience a faster rate of BMD decline than men are associated with menopausal status faster experienced by women than men, causing a decrease in estrogen hormone that causes osteoblast activity to decrease and osteoclast activity increases. Decreased hormone estrogen will cause parathyroid hormone and vitamin D absorption decreased so that the activity of bone formation decreased. The purpose of this research...
is to know the description of Bone mineral density and sex of osteoporosis patient in Orthopedic Outpatient Clinics Dr. Zainoel Abidin General Hospital, Banda Aceh-Indonesia.

Methods: This research is descriptive research with approach method of observation or data collection at one time. The research was conducted in Poly Orthopedic General Hospital of Dr. Zainoel Abidin General Hospital, Banda Aceh for 3 days on 3-5 April 2017. Sampling was done by using a non-probability sampling method and total sampling technique.

Results: The results of this study obtained respondents research more women, as many as 76 respondents (72.4%). Most of the research respondents with BMD osteopenia were 49 respondents (46.7%).

Conclusions: The conclusions of this study were more female respondents, and the result of most BMD examinations was osteopenia.

Keywords: osteoporosis, bone mineral density, sex.

Profile of head injury related to history of using helmet among motorcycle rider accident

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Introduction: Based on data in 2011, traffic accidents revealed 72% of traffic accidents in Indonesia, including motorcycle accidents. Data from Dirinti, Aceh Police during the last 5 years recorded an increasing number of traffic accidents from 2013 to 2016, with 672 fatalities in 2013 and 854 fatalities in 2016.

Methods: This research is an observational analytic with retrospective study. Data were conducted from medical records in Dr. Zainoel Abidin General Hospital Banda Aceh. A hundred and twenty patients were involved in this study.

Results: We recorded 120 patients with head injury during June 1st to December 31st, 2017. We found 68 motorcyclists (56%) who used helmets and 52 motorcyclists (44%) who did not use helmets. Forty patients, which is the majority of subjects (31.5%) were between 19-29 years old. Twenty-two motorcyclists (32%) with history of using helmets during accidents are between 19-29 years old and 18 motorcyclist (26%) with history of not using helmets are also between 19-29 years old. Gender distribution of head injury patients in this study was about 80 male patients (75%) and 40 female patients (25%).

We recorded 28 male patients (41%) and 15 female patients (22%) with history of using helmets during accidents and 52 male patients (41%) and 25 female patients (22%) with history of not using helmets during accidents. Severe head injury (GCS: 3-8) was found in 18 patients (15%), moderate head injury (GCS: 9-14) were found in 38 patients (32%), and mild head injury (GCS: 13-15) were found in patients 64 patients (53%). The highest number of brain lesion was cerebral edema which occurred in 40 patients (33%) among all patients involved, and specifically occurred in 32 patients (40%) that used helmets, while the other intracranial lesion occurred in 18 patients (40%) that did not use helmets during accidents.

Conclusions: This study still found the high number of motorcyclists who do not use helmets which resulted high number of head injuries.

Keywords: traumatic brain injury, helmet, epidemiology.

Characteristics of urinary stone diseases based on stone analysis results in Dr. Zainoel Abidin Aceh Hospital 2018-2019

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Introduction: Urinary tract stone is one of the most common urologic problems. The adequate stone analysis will help to comprehend the pathogenesis mechanism of urinary tract stones. This study aims to discover the characteristics of urinary tract stones based on stone type analysis at Zainoel Abidin Banda Aceh General Hospital in 2018-2019.

Methods: This study was conducted using descriptive method with cross sectional approach. The inclusion criteria include patients that present with urinary tract stone and were performed surgery at Zainoel Abidin Aceh General Hospital in 2018-2019. Patients who refused to undergo stone analysis was considered as exclusion criteria. The sampling method used in this study is stone from surgery and the composition of the stones were analysed in the laboratorium.

Results: From the total of 36 patients that had urinary tract stones, most were man as many as 36 people (72%). Most city origins were Banda Aceh as many as 15 people (41%). Largest number of age group that had urinary tract stone was 26 – 35 years old and 46 – 55 years old, both were as many as 9 people (25%). Based on stone analysis, calcium oxalate monohydrate was the most common type found as many as 17 people (47%) and uric acid stone as many as 14 people (38%). Uric acid stone was frequently found in men while in women calcium oxalate monohydrate was the most common type to be found.

Conclusion: Calcium oxalate monohydrate stone is the most common stone found at Zainoel Abidin Aceh General Hospital in 2018-2019. The results found in this study could be used as a consideration for further management to reduce the risk of recurrence.

Keywords: urinary tract stone, stone analysis, calcium.

Gastrochisis profile at the Regional General Hospital Dr. Zainoel Abidin Banda Aceh in period 1st January 2015 until December 31st 2018

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Introduction: Gastroschisis is a defect of the congenital abdominal wall which is characterised by extrusion of intestinal loops and other abdominal organs outside the abdominal wall without a membrane covering. 10.9 occurred per 10,000 births. General Hospital Dr. Zainoel Abidin Banda Aceh has become a referral center that is able to deal with one of these disorders, but there are not enough reports on the profile of gastrochisis infants. To find out the profile of gastrochisis patients at the General Hospital Dr. Zainoel Abidin Banda Aceh in the period 1st January 2015 until December 31st 2018.

Keywords: gastroschisis, profile, Regional General Hospital, Banda Aceh.

ABSTRACT

ABSTRACT
Methods: Data was taken from medical record of gastrochisis infant patients for the period 1st January 2015 until December 31st 2018. Results: There were 19 infants with gastrochisis, 10 patients (52%) male sex, 15 patients (78.9%) with low birth weight, 10 patients (52%) have other congenital abnormalities, 13 patients (68.4%) Apgar score asphyxia is mild, 11 patients performed repair defect measures, 13 patients were born in a caesarean section, 14 patients were born to mothers aged 20-25 years, 18 patients with the result of death, the age of patients admitted to hospital was 1 day of age. 14 patients with a survival >48 hours. Conclusion: Gastroschyzis most common occur baby boy with low birth weight. Keywords: gastroschisis, congenital abnormalities, characteristics.

Outcome Hirschsprung’s disease patients postoperative TEPT in Dr. Zainoel Abidin General Hospital Banda Aceh 2016-2017

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Introduction: Hirschsprung disease is a congenital anomaly from gastrointestinal system where there is no ganglion cell in mesenteric and submucosal plexus from distal colon. Approximately 1:5000 birth around the world got Hirschsprung. Comparison between male and female is 4:1. Aim of this study is to know about outcome of Hirschsprung patients post TEPT in Dr. Zainoel Abidin General Hospital Banda Aceh. Methods: This study was retrospective descriptive design with the cross sectional approach. Place of study is in policlinic, surgery ward and surgery room Zainoel Abidin General Hospital Banda Aceh from December 2017 until February 2018. Sample was take in non-probability with total sampling technique. Sample of this study is patients done operative diagnosed with Hirschsprung disease at Dr. Zainoel Abidin General Hospital in interval six months. Results: Total patients become sample in this study is 34 with most distribution 0-1-month-old 16 patients (47.1%). Sex distribution is 18 patients (52.9%) male and 16 patients (47.1%) female. From total patients, good outcome was 0-1-month-old 16 patients (47.1%). Sex distribution is 18 patients (52.9%) male and 16 patients (47.1%) female. From total patients, good outcome was 13 patients and 21 patients with moderate outcome. Abnormalities location in most Hirschsprung patients is in the rectosigmoid. Conclusion: Hirschsprung disease is aganglion congenital anomaly in distal intestine mesenteric. Early treatments could improve patients outcome. Keywords: Hirschsprung’s, TEPT operative, outcome.

Profile of bacterial pattern and sensitivity test of patients with kidney stone with urinary tract infection at the Regional General Hospital Dr. Zainoel Abidin Banda Aceh 2017

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Introduction: Kidney stones are the most common causes of urinary tract disorders. It is aggravated by infection of certain bacteria. Kidney stones caused by infection was called struvite stones. A kidney stone can caused lesions in the urinary tract allowing bacteria to infect the urinary tract. The purpose of this study was to determine the pattern of germs and antibiotic sensitivity among the Urinary Tract Infections patients with kidney stones in the Laboratory of Microbiology dr. Zainoel Abidin by using secondary data that is medical records from January to December 2017. Method: This study is a descriptive study. The sample was taken in a year by total sampling. a list of 25 respondents met the inclusion criteria. Results: The results showed that the most common bacteria found in patients with kidney stones with UTI are E. Coli as much as 8 cases (32%), followed by Klebsiella sp. with 6 cases (24%), Staphylococcus aureus bacteria causes 4 cases (16%), Pseudomonas sp. also causes 4 cases (16%), and Proteus sp. causes 3 cases (12%). The results of antibiotic sensitivity testing found that Amikacin (100%) are more sensitive against gram-negative bacteria and Vancomycin (100%) are more sensitive against gram-positive bacteria. Conclusion: This study is expected to be used as a guideline for the hospital to take the policy in the prevention of UTI. Keywords: Kidney Stone, UTI, Pattern of germs, antibiotic sensitivity.

Profile analysis of urinary tract stones in Banda Aceh

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Introduction: Urinary tract stones (UTS) or urolithiasis are pathological conditions that are often disputed in terms of incidence, aetiology, pathogenesis and treatment. Incidence or composition of stones are not same in various parts of the earth, vary according to ethnicity and geography. Urinary tract stones are a pathological condition that is still a clinical problem, especially if there is a recurrence. This condition often appears at productive age. One way to reduce the recurrence rate of urinary tract stones is by analysing stones. Stone analysis can be done to determine the type and composition of the identified stones. Methods: This descriptive study was obtained from 21 patients who examined urinary tract stones for analysis during the period 2017 - 2018 in Banda Aceh. The stone is analysed using a rock based on a semi-quantitative chemical test. This research also uses the titrimetric method for calcium, and the colourimetric method is used for oxalate, phosphate, magnesium, ammonium, uric acid and cystine. The data obtained are grouped in the form of frequency distributions. Results: The results found 442.9% calcium oxalate + brushite stone, 28.6% calcium oxalate + uric acid type stone, 14.3% calcium oxalate type stone and calcium oxalate + strufit + brushite type stone. Conclusion: Calcium oxalate + brushite stone is the most type of kidney stone found in Banda Aceh. Keywords: urinary tract stone, profiles, analysis.
Management of urinary tract stones profile at Dr. Zainoel Abidin General Hospital, Banda Aceh-Indonesia

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Introduction: Urinary tract stone in Indonesia remain the largest portion of the total number of patients in the urologic cases. There are many patients who suffered urinary tract stone but the incidence is still incompletely reported. Aim of this study is to determine the urological surgery of urinary tract stones at Dr. Zainoel Abidin General Hospital from 1 January 2017- 30 Juny 2019.

Methods: Data was taken by retrospectively. Samples are urinary stone disease patients undergoing urological surgery at Dr. Zainoel Abidin General Hospital

Results: The result showed the prevalence of urinary tract stone was 1001 samples. By gender, men are greater than women which are 655 (65.4%). By age group; group of 41-60 years are than other group, which is 514 (51.3%). By the diagnose of stones, kidney stones are from other group, which is 702 (70.1%) samples. By urological surgery, ESWL is from other, which is 380 (38%) samples. The distribution of urological surgery based on diagnose of urinary tract stones, in kidney stones, ESWL is dominant performed on 380 (38%) samples; in ureteral stones, Lithotripsy is dominant performed on 122 (59.1%) samples in vesicastone, lithotripsy dominant performed on 58 (59.8%) samples and in urethral stones, pushback was done on 2 (40%) of the sample.

Conclusion: Based on this research it was found that men suffer more urinary tract stone disease that women, with the location of the stone most often in the kidneys and the most frequently performed action is ESWL.

Keywords: urinary tract stone, management of urinary tract stones profile.

Prevalence of mandibular fracture in Dr. Zainoel Abidin Hospital during the year 2018

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Introduction: Mandibular fracture is the second most frequent fracture of the facial bones, it is because of mandibular location that splits away from the cranium. Mandibular fracture is a discontinuity of mandibular bone caused by trauma or pathological conditions in the face. The fact is that a traffic accident in Aceh increased over the years. The aim of the study is to know the prevalence of mandibular fracture based on age, aetiology, gender, and anatomic location in Dr. Zainoel Abidin Hospital, Banda Aceh, during the year 2018.

Method: This study was using a descriptive method with case-control approach, by viewing the medical record of all patients with mandibular fracture in Dr. Zainoel Abidin Hospital, Banda Aceh, during the year 2018.

Results: From January 2018 to December 2018, 82 patients were having mandibular fracture. Where adult (18 – 40 years) is the most from age group with the 51.22% percentage. Men are more common than women by 82.93% percentage. Traffic accidents are the cause of all mandibular fractures with the most fracture location is in mandible’s symphysis with the 50% percentage.

Conclusion: Mandibular symphysis fracture is the most frequent mandibular fracture with the most frequent cause is by traffic accident.

Keywords: mandibular fracture, mandibular symphysis, accident.

Characteristics of severe head injury patients in Dr. Zainoel Abidin Hospital, Banda Aceh-Indonesia

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Background: Head Injury is the leading cause of mortality among productive population. Approximately 5% of patient with head injury die at the scene. This study aims to determine the characteristics of severe head injury patients at Dr. Zainoel Abidin Hospital Banda Aceh in 2018-2019.

Methods: This descriptive study was conducted at the Dr. Zainoel Abidin Hospital, Banda Aceh. Patients history with severe head injury admitted to emergency unit from March 2018 to February 2019, including age, sex, GCS, intracranial lesions, surgery and outcome were also included.

Results: Thirty-nine head injury patients were reviewed. Patients distribution based on age group, age ≥40 years 18 patients (46.1%), age 21-40 years 12 patients (30.8%) and age 1-20 years 9 patients (23.1%). Based on sex group, male 31 patients (79.5%) and female 8 patients (20.5%). Based on level unconsciousness, GCS 7-8 19 patients (48.7%), GCS 5-6 13 patients (33.3%), and GCS 3-4 7 patients (17.9%). Based on intracranial lesions, intracerebral hematoma 17 patients (43.6%), mixed-type 11 patients (28.2%), epidural hematoma 8 patients (20.5%) and subdural hematoma 3 patients (7.7%). Based on the treatment group, 21 patients treated conservatively (53.8%) and 18 patients required surgery (46.2%), respectively. Mostly, 12 patients with GCS 7-8 required surgery (30.8%). For overall outcome, 12 patients were survived (30.8%) and the remaining were died 27 patients (69.2%). Eight surgery-treated patients (44%) were survived and the remaining 10 patients (56%) were died.

Conclusion: Research conducted on 39 cases of severe head injury was found most in the male 79.5% and age ≥40 years 46.1%, GCS 7-8 is most commonly found 48.7%, the most lesion found was intracerebral hematoma 43.6% and the survived patients after surgery were 44%.

Keywords: severe head injury, GCS, outcome.

Urethrocutaneous fistula occurrence after urethroplasty in hypospadias in Dr. Moewardi General Hospital, Surakarta June 2014 - June 2019

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Introduction: Urethrocutaneous fistulae (UCFs) represent one of the most

frequent causes of morbidity after urethroplasty. The study aims to assess the incidence and complications of urethrocutaneous fistula after urethroplasty in hypospadias at Dr. Moewardi General Hospital Surakarta from June 2014 – June 2019.

Methods: This research is a descriptive study with a retrospective design. All patient medical records of hypospadias and urethroplasty have been registered at the Dr. Moewardi General Hospital from June 2014 to June 2019 was collected and analysed.

Results: During June 2014-June 2019 there were 79 cases of hypospadias and all of them had been carried out by Urethroplasty. Seventy-nine cases granular hypospadias were divided into 8 cases (10%), distal hypospadias type 27 cases (34%) and proximal hypospadias type 44 cases (56%). Of the 44 cases of proximal hypospadias, penoscorial hypospadias were 29 cases (36%). Of 79 hypospadias 6 cases (8%) had urethroplasty at 0-5 years of age, 24 (30%) had 6-10 years of age, and 49 (62%) had >10 years of age. Complications of urethrocutaneous fistula after urethroplasty there are 7 cases, which is about 9% of all cases of hypospadias. 6 cases (86%) of them occurred in the proximal type and 1 (14%) of them were distal types. 6 cases (86%) included in the age group of more than 10 years while 1 case (14%) belonged to the age group of 5-10 years.

Conclusion: Most hypospadias are proximal hypospadias, especially penoscorial types, as well as urethrocutaneous fistula events, which mostly occur in proximal hypospadias at Dr. Moewardi General Hospital. The occurrence of urethrocutaneous fistula is more common in the age group >10 years.

Keywords: urethrocutaneous, hypospadias, complication, surgery.

The effectiveness of anti-neuropathic pain in cancer pain patients in Dr. Zainoel Abidin General Hospital, Banda Aceh-Indonesia

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Introduction: Cancer pain is the most common source of disorders associated with cancer, 75% of patients experience pain that occurs in all stages of cancer with moderate to severe intensity. Neuropathic pain affects up to 40% of cancer patients. During this time, cancer pain has traditionally been treated with opioids, but adjuvant therapy such as Gabapentin is effectively used to reduce cancer-related pain compared to opioid monotherapy. This study aims to determine the effectiveness of the use of anti-neuropathic pain in cancer pain patients in dr. Zainoel Abidin General Hospital Banda Aceh.

Methods: The type of this study was observational analytic and prospective approach using the Numeric Rating Scale (NRS) to measure pain intensity, DN-4 questionnaire to assess the type of pain, and an overview of the types of anti-neuropathic pain drugs used and evaluated for a maximum of 10 days to see a decrease in pain. The samples in this study were cancer patients who experienced cancer pain from August to December 2018.

Results: It was found that 71 respondents experienced cancer pain, with 50 respondents (70.4%) experience neuropathic pain and 21 respondents (29.6%) experience nociceptive pain. We found from one way ANOVA statistical test, combination of Gabapentin and Paracetamol more effective compare to Gabapentin, Opioid and Paracetamol which was 5.4.000 and combination of Opioids, NSAIDs and Paracetamol, less effective which was 2.4.000 in reducing pain. After the Post Hoc Duncan Test, we found gabapentin and combination of Gabapentin showed significant results in reducing pain compared to Opioid and Opioid combinations in cancer pain patients.

Conclusion: Gabapentin is most effective in reducing pain in cancer pain patients in dr. Zainoel Abidin General Hospital Banda Aceh.

Keywords: cancer pain, anti neuropathic pain, opioids, gabapentin.

Brain alteration in chronic pain and the relationship with pain score

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There have been many studies showing results that there is alteration in brain volume in chronic pain. Although there are some studies showing the increase of brain volume, but most of the studies showing the decrease in brain volume. The mechanism of alteration in brain volume is unknown for sure, what is clear is the cause of nerve hyperactivity in the pain pathway, from nociceptor to postcentral gyrus, it is interesting that the occurrence of alteration in the decrease of substantial grisea volume, occurs in the substantial grisea that corresponds to the location of the pain pathway in the brain, and this is one of the body’s way to reduce the pain score so that the patients become less pain.

Keywords: brain alteration, chronic pain, pain score.

The effect of adding isometric exercise plantar flexors on calf circumference in patients post open reduction internal fixation non-articular tibia fracture

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Introduction: Post operative non-articular tibia fracture some problems that often occur include; pain, muscles atrophy, muscles weakness, and joint stiffness that makes patients limited in their daily activities. Several factors that play a role in muscles atrophy and weakness is prolonged immobilisation and lack of exercise. Plantar flexor isometric exercise might effectively prevent the problem. They have not yet known the effect of plantar flexor muscle isometric exercise on calf circumference in the post open reduction internal fixation of tibia fractures, due to the lack of studies in this field. This study was conducted to investigate the effect of isometric plantar flexor on calf circumference in patients post open reduction internal fixation non-articular tibia fracture.

Methods: This clinical trial was true experimental with pre-post test control group design divided into two groups, group A obtained treatment of isometric exercises of the plantar flexor muscles, range of motion knee and ankle joint while group B obtained range of motion knee and ankle joint. We hypothesized there are differences in calf circumference between groups that do isometric exercises of plantar flexor muscles with groups without isometric exercises
Endovascular interventions thoracoabdominal aortic aneurysm in patients with Marfan Syndrome: systematic review

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Introduction: Marfan syndrome is an autosomal dominant connective tissue disease, due to the mutation of the fibrillin-1 gene. In patients with Marfan aortic syndrome, they will experience dilatation, aneurysm, and dissection, causing low patient life expectancy. Early symptoms in this patient include high posture, ectopia lentis, scoliosis, mitral valve prolapse, aortic root dilatation, and aortic dissection. Open surgery is the main treatment for aortic abnormalities in patients with Marfan syndrome. Elective aortic surgery has a mortality rate of 1.5% in experienced hospitals, but this mortality rate can reach 11.7% if it is performed in an emergency condition. Endovascular intervention is a therapeutic approach for patients with Marfan syndrome. This therapy provides a fairly good outcome by accelerating healing time, minimizing post-action pain, and reducing morbidity and mortality.

Method: This review was conducted at the Department of Surgery, Vascular Surgery Division, Faculty of Medicine, Universitas Indonesia-Ciptomangunkusumo Center Hospital, in accordance with PRISMA guidelines in November 2019. After searching the literature according to the search flow, obtained 16 journals with complete manuscripts. Then the researcher read the complete text and obtained 3 corresponding journals.

Result: Research by Waterman et al. The success of the procedure occurred in 6 patients (38%), primary failure occurred in 7 patients (44%), secondary failure occurred in 2 patients. Ince et al. The success of the procedure occurred in 6 patients, 1 patient died after 12 months post-surgery. Marcheix et al. 15 patients underwent endovascular stent graft therapy, 5 patients who experienced secondary failure.

Conclusion: Endovascular therapy is a good alternative choice for the management of thoraco-abdominal aortic abnormalities in patients with Marfan syndrome. Taking into account the patient’s condition such as age and the co-morbidities they have so that the selected therapy is safe for the patient.

Keywords: endovascular interventions, thoraco-abdominal aortic aneurysm, Marfan syndrome.

Biomarker infection and electrolyte imbalance after pediatric surgery in Pediatric Intensive Care unit

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Objective: To determine the frequency and outcome of Biomarker infection and electrolyte imbalance after pediatric surgery in Pediatric Intensive Care Unit (PICU) in Zainoel Abidin General Hospital.

Methods: All Children between the ages one month to 18 years admitted in PICU from January 2018 to November 2019 were included. Blood samples were drawn to determine biomarker infection, baseline sodium, potassium, calcium and 24 hourly or earlier.

Result: A total of 60 children were included in the study. Biomarker infection: leukocytosis was seen 66.67%. Electrolyte imbalance was seen 86.67%. Hypocalcemia was the most frequent abnormality electrolyte 80.77%. Imbalance of single electrolyte was seen 30.77%, two electrolytes 48.08%, three electrolyte 21.15%. Length of stay in PICU most frequent 48 hours-4 days.

Conclusion: Biomarker infection and electrolyte imbalance is important indicator after pediatric surgery.

Keywords: pediatric surgery, biomarker infection, electrolyte imbalance, length of stay.

Demographic and clinical characteristics of traumatic brain injury patients in the Dr. Zainoel Abidin Public Hospital, Banda Aceh-Indonesia

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Introduction: Traumatic brain injury (TBI) is responsible for more than one million hospital visits and significant cause of disability and death in all age groups, and sexes. Each day, there are 153 individuals who die from injuries including a traumatic brain injury.

Method: We use a retrospective cross-sectional study design. We collect data from patients admitted in our hospital on November 2018 that was diagnosed and treated for traumatic brain injury. The clinical information at follow-up was also analysed.

Result: We collected 60 cases of TBI, that consist of 35 male (58%) and 25 females (42%) with an average age of 18-39 years. Patients characteristics were as follows; 42% had post traumatic amnesia. Motor vehicle crashes constitute the leading cause of TBI 90% was followed by falls 8% and other leading causes were self-harm and assaults 2%. GCS scores found during the examination; 85% analysed patients presented with GCS scores ≥ 9 and 25% with score ≤ 8. Brain CT scanning findings were; 25% in cerebral, 18% epidural haemorrhage, 15% intracranial haemorrhage, and 12% subarachnoid haemorrhage. Laboratory findings; 80% patients about leukocyte count.
increase, 72% neutrophils segmented high, 7% hyperglycemia after TBI, 2% hyponatremia, 11% hypernatremia, 22% hypokalemia, 17% hyperkalemia and 30% hyperchloremia. **Conclusion:** We reported 60 cases of TBI and collected demographic data when the patient arrived in the hospital, clinical characteristics of GCS score, brain imaging and laboratory findings. This information can help inform TBI prevention strategies, identify research and education priorities, and support the need for services among those living with a TBI. **Keywords:** demographic, clinical characteristics, TBI, post-traumatic amnesia.

**Association between obesity and hormone receptor characteristics of primary breast cancer in Cipto Mangunkusumo General Hospital in 2017**

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**Introduction:** Obesity is an independent risk factor and prognostic factor of primary breast cancer. Abundant adipose tissue would lead to an increment of blood estrogen level; thus promoting proliferation of cancer cell, especially those with positive estrogen receptor (ER) and progesterone receptor (PR). No previous study explained the association between obesity and hormone receptor characteristics of primary breast cancer in Indonesia. **Methods:** We collected cases of primary breast cancer which is diagnosed and undergone immunohistochemistry examination at Cipto Mangunkusumo General Hospital in 2017. The subjects were divided into obese group and non-obese group. The ER and PR characteristics of both groups were compared. **Result:** We collected 202 cases of primary breast cancer, with 89 cases (44%) in obese groups and 113 cases (56%) in non-obese groups. The mean of body mass index (BMI) of the subjects was 24.45 (SD±4.3). Both groups were similar in terms of age, menopausal status, stage, histopathological morphology and grade. No significant association was found between obesity and ER or PR. We analysed correlation between BMI and the percentage of expressed hormone receptor, but no correlation was found. This finding did not conform with other western studies. The difference in characteristics of the subjects and other hormonal factors might contribute to the outcome. **Conclusion:** There is no association between obesity and hormone receptor characteristics of primary breast cancer at Cipto Mangunkusumo General Hospital in 2017. **Keywords:** obesity, hormone receptor, estrogen, progesterone, primary breast cancer.

**Fibrin glue application effect on collagen density and fibroblast quantity in primary colonic anastomose with intraperitoneal infection (New Zealand Rabbit Study)**

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**Introduction:** Leakage of anastomosis in the colon become one of the causes of morbidity and mortality are high in patients. The morbidity and mortality rates in patients with colonic anastomosis leakage range from 7 to 39%. In patients with peritonitis who do resection and anastomosis in the colon, the numbers of leaks are increased up to 2.5 times. The use of fibrin glue in several studies has been proven to protect colon anastomosis by increasing collagen production. The study is examining how the role of fibrin glue in the production of collagen and fibroblasts in a state of intraperitoneal infection. **Method:** The research is an experimental research. A total of 34 New Zealand rabbit samples were grouped into 2 groups, namely the control group and the treatment group. Samples were performed intraperitoneal infection induction with fecal injection. After 1 day we cut the colon and perform the interrupted suture anastomose in the colon that has been cut. In the control group the wound was immediately closed and in the treatment group, after suturing anastomose an application of fibrin glue was applied to the anastomosis. Samples of anastomose tissues are taken 7 days after the action. **Results:** Collagen density was assessed in the score 1-5 and the amount of fibroblasts was assessed in the score 1-5. Data processed by SPSS, testing normality Shapiro-Wilk obtained results of the distribution is not normal (p = 0.000). The data was then processed using the Mann Whitney test, which resulted in a significant difference (p=0.000) between the fibrin glue group (mean: 3.7) and the control group (mean: 2.1); also found a significant difference (p = 0.000) for the number of fibroblasts (mean 3.6) with the control group (mean: 2.1). **Conclusion:** Applying fibrin glue to the primary colonic anastomose with an intraperitoneal infection can protect the anastomose and maintain the healing process. **Keywords:** fibrin glue, collagen, fibroblasts, anastomosis, infection intra peritoneal.
The comparison of masticatory status in ameloblastoma patients after segmental mandibular resection with LC type defect who have undergone mandibular reconstruction with plate and Kirschner wire in Dr. Soetomo General Hospital Surabaya in 2015 - 2019

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Introduction: Ameloblastoma is an odontogenic epithelial neoplasm of the mandible originating from the undifferentiated enamel layer. The incidence is 0.6 per 1,000,000 population. Mandibular resection is part of the surgical operation for ameloblastoma. Patients who have undergone mandibular resection treatment experienced physiological changed, especially masticatory disorders. The masticatory status is also seen as a measure of the success of a mandibular resection and mandibular reconstruction. Therefore an assessment of the patient’s masticatory status is required after undergoing segmental resection and mandibular reconstruction. The study aims to evaluate difference between the masticatory status of ameloblastoma patients after mandibular segmental resection with LC type defect who have undergone mandibular reconstruction with Plate and Kirschner wire performed at the Head Neck Surgery Departement Soetomo General Hospital Surabaya.

Methods: Comparative study with cross sectional observational analytic design to evaluate the masticatory status of ameloblastoma patients who have undergone segmental mandibular resection with LC type mandibular defect and mandibular reconstruction with plate or Kirschner wire. The sample of this study was 40 patients who have undergone reconstruction with plate or Kirschner wire who met the inclusion and exclusion criteria.

Results: The results showed that the mean age in the reconstruction group with Kirschner wire was 38.25 ± 3.8 years, while in the Plate reconstruction group the mean age was 42.5 ± 4.3 years. Reviewed from the status of mastication, the mean age was 42.5 ± 4.3 years. Reviewed from the status of mastication, the mean age was 42.5 ± 4.3 years. In the Kirschner wire group, the masticatory status was good in 10 patients (50%) and poor in 10 patients (50%). In the Plate group, the masticatory status was good in 16 patients (80%) and poor in 4 patients (20%). Based on the data, there is a statistically significant relationship between the masticatory status patient which was reconstructed using Plate compared with the masticatory status patient by using Kirschner wire (p = 0.02).

Conclusion: There are differences in masticatory status in ameloblastoma patients after mandibular segmental resection with LC type defect who have undergone mandibular reconstruction with Plate and Kirschner wire which is the masticatory status patients who had undergone reconstruction with Plate was better than patients who had undergone reconstruction with Kirschner wire.

Keywords: ameloblastoma, segmental mandibular resection, plate, Kirschner wire

The effect of thyroidectomy on the quality of life in health aspect of multinodular nontoxic goiter before and after surgery

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Introduction: Goiter can be classified as toxic or non-toxic, diffuse or nodular, single or multiple. Non-toxic multinodular goiter is affected by endocrine disruption in 500-600 million people worldwide and is often found in iodine-deficient areas. Characteristics of non-toxic multinodular goiter are slow growth, continuous, and expanding, and the most common complaints were the compression effects. This disease is not deadly but often reduces the quality of life of patients so that the main goal of therapy is to improve the quality of life of patients. The quality of life of patients before and after surgery can be measured by using thyroid dysfunction questionnaire. The aims of this study were understanding the influence of thyroidectomy on the quality of life of patients with non-toxic multinodular goiter age of 21-45 years before and after surgery.

Methods: The study subjected patients with non-toxic multinodular goiter at the Dr. Soetomo General Hospital in 2018-2019 who has been performed surgical therapy. Data obtained in the primary data and secondary data of the medical record. Data obtained from filling out the questionnaire.

Results: Obtained a mean age of subjects of research of 39.53 ± 16.89 years (n = 30). From the data obtained we test for normality and homogeneity. After that student t test was used. The difference was found significant in value of quality of life (p = 0.021) at the time after surgery (mean = 1.77) compared to before surgery (mean = 1.37).

Conclusion: The surgical therapy in non-toxic multinodular goiter is able to improve the quality of life of patients. Surgical therapy still has to be considered for the advantages and disadvantages that come from the therapy.

Keywords: thyroid cancer, thyroid, multinodular non-toxic goiter, thyroid dysfunction questionnaire

The difference of Ki-67 expression in patients of papillary non-metastasis and regional metastasis patients in Dr. Soetomo General Hospital Surabaya

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Introduction: Thyroid carcinoma is the most common tumor arising from malignancy in endocrine. The incidence of thyroid carcinoma increased. Based on GLOBOCAN 2012, thyroid carcinoma comprised of 2.1% of the total
incidence of malignancy cases with a mortality rate of 0.5 per 100,000 people. Therapeutic strategies for thyroid disease include medical treatment and surgery, including sub-total thyroidectomy and total thyroidectomy. In thyroid cancer, it was found that there were differences in the level of expression of Ki-67 between the benign nodule group and the malignant nodule group. The more virulent a nodule is, the higher the expression level of Ki-67. So, the researcher is trying to find out whether the examination of Ki-67 can be a predictor factor in cases of thyroid cancer metastasis is important to do.

**Method**: This type of research is a comparative study with observational analytic design by cross sectional to compare Ki-67 expression in non-metastatic and regional metastatic thyroid cancer. The sample of this study was 30 patients diagnosed with post-total thyroidectomy and post-functional neck dissection at Dr. Soetomo General Hospital Surabaya in 2018 who met the inclusion and exclusion criteria.

**Results**: The results showed that there were 15 patients with thyroid cancer with lymph node metastases who performed total thyroidectomy + FND (50%) and 15 patients with thyroid cancer without lymph node metastases who performed total thyroidectomy (50%). The mean age in both non-metastatic and metastatic thyroid cancer groups was 48 ± 15.9 years. In the histopathology results, all patients (100%) had papillary carcinoma. The difference in expression of Ki-67 showed that in the metastatic thyroid cancer group, the mean of Ki-67 was higher, which was 46.1 ± 11% compared to the non-metastatic thyroid cancer group, which was 33.8 ± 6.4%. In the statistical test found statistically significant differences in Ki-67 expression in the metastatic thyroid cancer group compared with the non-metastatic thyroid cancer group (p = 0.001).

**Conclusion**: There is a difference in the level of expression of Ki-67 in patients with non-metastatic and regional metastatic thyroid cancer, we found that there is an increase in expression of Ki-67 in the metastatic thyroid cancer group compared to the non-metastatic thyroid cancer group.

**Keyword**: thyroid cancer, Ki-67, metastases, non-metastases.

### Surgery in foreign body ingestion and aspiration: descriptive study

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**Introduction**: Foreign bodies in upper digestive tract as well as respiratory tract are common cases in daily life. This incident can occur in all age groups, ranging from children to elderly. Endoscopy and bronchoscopy are the first treatment options, nevertheless case with complications which endoscopy or bronchoscopy cannot be done, it requires another extraction procedure specifically surgery.

**Methods**: We conducted a retrospective review of patients who came to consult to Thoracic Cardiovascular Surgery Department by ENT Department. The data obtained are from 2009-2019.

**Result**: Out of 290 patients recorded, experiencing foreign body impaction in both digestive and respiratory tract for the last 10 years, the highest number was digestive tract with 243 cases (82.8%) and 47 cases for respiratory tract (16.2%). From 17 patients who underwent surgery, 70.6% men and 29.4% women. The age group of children and adults had the same number with seven patients (41.2%) and elderly with three patients (17.2%). The highest number of surgical procedure was thoracotomy with 11 patients (58.8%) while cervical esphagotomy with six patients (34.2%).

**Conclusion**: The failure of the extraction procedure using endoscopy or bronchoscopy in the case of a foreign body leads to surgery as a definitive therapy for patients. The age group of children and adults have same number. Cases of impaction in the esophagus are the most common cases. The most commonly surgical procedure performed is thoracotomy. In this study the success rate of extraction by surgery reached 100% without additional morbidity and mortality.

**Keywords**: foreign body, aspiration, ingestion, surgery.

### Validity prognostic of S.T.O.N.E nephrolithometry (size tract obstruction number of calyces essence) score to predict stone free status in kidney stone patients after percutaneous nephrolithotomy

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**Introduction**: Kidney stone still a health problem in the world. Today, the choice of therapeutic modality is also increasingly varied, percutaneous nephrolithotomy (PCNL) is still the first line for stone therapy with varying success rates, some high or low. Sometimes need an additional measures such as ESWL, RIRS for the rest stone and good preventive behaviour are required. This can be influenced by several risk factors, a risk factor predictor is needed to get a high stone-free rate in patients after PCNL.

**Methods**: This research is a cross sectional retrospective study, we recorded 50 patients at the Medical Records Installation at Sanglah Education General Hospital in Denpasar since January 2018-November 2019 with kidney stones performed by PCNL, each patient will be calculated S.T.O.N.E Nephrolithometry score can be seen on CT Stonography and the presence or absence of stone after PCNL. The parameters of S.T.O.N.E Nephrolithometry are size, tract obstruction, number of calyces, essence. And calculated the best cut off, sensitivity, specificity, NPP, NPN, and accuracy of the S.T.O.N.E Nephrolithometry score to predict stone free status after PCNL.

**Results**: The best cut off value in this study is <9, where patients with S.T.O.N.E Nephrolithometry score < 9 have a risk stone free after PCNL 25(50%) patients, while the S.T.O.N.E Nephrolithometry score ≥9, has a risk of not being free and there are stones left 25 (50%) patients. S.T.O.N.E Nephrolithometry had sensitivity 60.6%, specificity 70.6%, and 64 % accuracy in this study. Positive predictive value and negative predictive values were 80% and 48%.

**Conclusion**: S.T.O.N.E Nephrolithometry score sensitively predicts stone free status in kidney stone patients after PCNL and can be used as a tool to education the patient before PCNL and therapy.

**Keywords**: S.T.O.N.E Nephrolithometry score, PCNL, stone free status.
Open surgery with intraoperative enteroscopy in massive jejunoileal bleeding in pediatric patient: an evidence-based case report

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Introduction: To determine the level of evidence of surgical exploratory laparotomy with intraoperative enteroscopy (IOE) as a treatment in massive jejunoileal bleeding in children.

Methods: We conducted a literature search on databases such as Cochrane, PubMed, ScienceDirect, and Google Scholar. Abstract and title screening was done based on exclusion criteria, inclusion criteria, and double filtering. The selected article then reviewed using critical appraisal tools based on its validity, importance, and applicability.

Results: Application of open surgery with IOE as the final treatment that can be recommended in critical or life-threatening condition of jejunoileal bleeding.

Conclusion: surgical exploratory laparotomy with intraoperative enteroscopy is the best final treatment that can be a choice for massive jejunoileal bleeding, whether in acute case or repeated case, supported with level of evidence 4.

Keyword: massive jejunoileal bleeding, pediatric patient, level of evidence, intraoperative enteroscopy.

Distribution of cleft lip and palate patients who performed surgery in Aceh Cleft Lip And Palate Center period of November 2018 - October 2019

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Introduction: Cleft lip and Cleft Palate or Orofacial Cleft, which is known as the cleft lip is a condition of birth defects where an unusual opening or cleft is formed on the lips or palate. The cleft lip or labiophysic is a congenital anomaly that formed in the first trimester of pregnancy because of the mesoderm is not formed in that area so the nasal and maxillary processes that have been fused into a broken back. Cleft lip can be caused by genetic and environmental factors. This study aims to determine the total distribution of cleft lip patients who performed surgeries at the Aceh CLP Center, period of November 2018 - October 2019.

Methods: This study used a retrospective descriptive method by using the data that collected at the Aceh CLP Center, in November 2018 - October 2019. The total number of patients that performed the surgery was 318 patients.

Results: From this study, presentations for each type of surgery were: Cheilorrhaphy 131 patients (41%), Palatorrhaphy 109 patients (34%), and Rhinoplasty 78 patients (25%). Presentation by sex: 173 male patients (54%), 145 female patients (46%). Presentation by age for surgery: 3-6 months 79 patients (25%), 6-18 months 107 patients (34%), >18 months 135 patients (41%). While the presentation by the age limit according to the Cheilorrhaphy operation indication: appropriate 71 patients (54%), not appropriate 60 patients (46%), presentation by the age limit according to the Palatorrhaphy operation indication: Appropriate 57 patients (52%), Not appropriate 52 patients (48%).

Conclusion: From this study, it can be concluded that the most distribution is Cheilorrhaphy surgery, male age, and surgery >18 months, and the corresponding for age limit of Cheilorrhaphy operation indication is appropriate, the corresponding for age limit of Palatorrhaphy operation indication is appropriate.

Keyword: distribution, cleft lip, cleft palate, cheilorrhaphy, palatorrhaphy, rhinoplasty.

Characteristics of cleft lip patients in Aceh period November 2018 - October 2019

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Background: Cleft lip (CL) is the most common congenital anomaly with a percentage reaching 65% of all cases of congenital malformations in the head and neck. Asian populations are the most vulnerable group to develop CL. In Indonesia, the prevalence of cleft lip reaches 0.2%. Aceh is one of Province in Indonesia which prevalence rate of CL is higher than the national prevalence reaches 7.8%. Nowadays, there is no data about the distribution of CL in Indonesia including Aceh.

Method: We conducted a retrospective study involving 318 patients operated by Smile Train Aceh from November 2018 - October 2019 at Malahayati Hospital, Aceh Besar. Demographic information was recorded such as the region, gender, and type of CL experienced by the patient. Data is displayed as a percentage.

Results: Our results has showed that the highest incidence of CL in Aceh is in Aceh Besar followed by Bireuen and Banda Aceh with percentages 16.1%, 10.8% and 9.0% respectively. Besides, we have found that male is more frequent than women with percentages 54.4% and 45.6% respectively. The most common type of CL occurred in our study is Complete Unilateral Left CL, followed by Complete Bilateral CL, and Complete Unilateral Right CL with the percentage of respectively 20.89%, 9.81%, and 9.49% in Aceh.

Conclusion: Aceh Besar has the highest incidence rate region. Male is more dominant than female Complete Unilateral Left CL is the most common type of CL suffered in our study.

Keyword: cleft lip, regional distribution, characteristics.