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DEPARTMENT OF INTERNAL MEDICINE
RAJA ISTERI PENGIRAN ANAK SALEHA HOSPITAL

Providing
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Oral presentation: OP1

Computerized tomography guided fine needle aspiration cytology or biopsy of lung lesions – our experience with analysis of efficacy, yield and intricate complications from RIPASH.

Dr. Panduru Kishore

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ABSTRACT

Introduction:

In 1981, the first fine-needle aspiration biopsy in the United States was done at Maimonides Medical Center. Today, this procedure is widely used in the diagnosis of cancer and inflammatory conditions. Computerized Tomography (CT) guided Fine Needle Aspiration Cytology (FNAC) and Biopsy of lung lesions has been a good interventional approach for the diagnosis of lung lesions.

Methods:

A two-year retrospective analytical study from January 2016 till December 2017 is carried out to evaluate and compare our experience with the rest of the similar studies done elsewhere. The study is to evaluate the effectiveness, complications and also to look into various pattern of diagnosis. A total of 73 patients underwent either FNAC or Biopsy under CT guidance during the two-year period were collected and analyzed.

Results:

Majority (56%) of the patients were male and are in the age group of 41-60 years (48%).

The diagnostic accuracy of the procedure with definitive diagnosis was 70% followed by benign inflammation (22%). The Majority are malignancy (60%) followed by Tuberculosis (7%), and infections (3%). The most common malignancy encountered in our observation are Adenocarcinoma (45%) followed by Metastatic Carcinoma (18%). The CT guided FNAC was done mostly in the upper lobes (34) followed by Lower lobes (31). There are few complications encountered in our observation, mainly pneumothorax (11, 15%) out of which only 2 needed therapeutic intervention and Haemoptysis (2, 2.7%) which were treated conservatively.

CONCLUSION:

CT FNAC or Biopsy is a safe procedure with minimal complications and fairly accurate categorical diagnosis and the figures are comparable with other studies.

Keywords: CT guided lung biopsy, CT guided FNAC, Pulmonary nodules, Pulmonary masses.

Oral presentation: OP2

Staphylococcus aureus bacteraemia in ripas hospital, brunei. How and what are we doing with it currently? Phase 1 analysis of an ongoing descriptive study.

Dhiya Metussin

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Introduction:

Staphylococcus aureus is a gram-positive organism that normally resides on our skin. In susceptible patients, it can cause life-threatening blood-stream infections if not treated promptly and adequately. Currently in Brunei, there are no locally published data on the burden of *Staphylococcus aureus* bacteraemia.

Methods:

This is an ongoing observational study which is currently looking at our current burden of *Staphylococcus aureus* cases in RIPAS Hospital, Brunei Darussalam since 1st February 2019. We have decided to analyse the data in two separate phases. The aims of Phase 1 analysis (which looked at data collected from 1st February 2019 to 30th April 2019) is to understand the patient's baseline demographics, identify the likely sources of the infection and to determine secondary complications related to it. Positive *Staphylococcus aureus* blood culture results were directly notified to us by Microbiologists after which the patients data were collected in a designed data proforma via a BRU-HIMs review.

Results:

Phase 1 analysis showed that out of 37 notified cases, majority were identified as methicillin-sensitive *Staphylococcus aureus* (MSSA) bacteraemia. Baseline demographics include patients over 55 years old, males, under Renal care with co-morbidities such as hypertension, chronic kidney disease, type 2 diabetes mellitus, pre-existing cardiac disease, and chronic dermatopathy. Major sources of the bacteraemia were skin followed by central line associated blood stream infections. Main secondary complications from the bacteraemia were infective endocarditis and septic arthritis.

Conclusion:

From the results, we are concerned if these results reflect potential gaps in our current

infection control practices. Therefore, for this phase I analysis, we call for the improvement and strengthening of our infection prevention and control practices across all health care workers. Phase 2 analysis will re-look at the sources of infection as well as reviewing clinical management practices of the *Staphylococcus aureus* bacteraemia cases from 1st May 2019 – 31st October 2019.

Keywords: *Staphylococcus aureus*, Bacteraemia, Methicillin-sensitive bacteraemia, MSSA bacteraemia, MRSA bacteraemia.

Oral presentation: OP3

Dementia awareness among healthcare professionals – a survey of brunei's experience.

Lih Vei Onn

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Introduction:

Dementia is an increasing public health issue. Raising its awareness is one key action area in WHO Global Action Plan 2017 – 2025. One way to demonstrate awareness is to evaluate how responders perform in knowledge based survey. Any gap in the knowledge reflected in incorrect responses may help to guide future delivery of awareness campaign.

Methods:

Dementia Knowledge Assessment Tool version 2 (DKAT2) is a tool developed in Australia with 21 questions related to dementia knowledge. Extra key demographic information such as education level and any prior dementia experience are collected in an anonymous manner using electronic Google form. This is sent out as an online survey link via web-based chat groups for voluntary basis of

completion by the intended group from September to October 2019. There is a short attached message with brief explanation to the group of healthcare professionals which include nursing students, doctors in different hospital specialties and Allied Health Professionals.

Results:

Total of 80 responses received. Average score is 14 / 21. 85% of the respondents are degree holders. 70% of the respondents have previous experience with dementia. 36.4% has their prior dementia experience via social media sharing platform after healthcare workplace attachment or educational curriculum. Responders scored less than 50% in questions 7, 8, 12,18 and 20. All questions have recorded varying percentage of "don't know" responses but questions 4, 8,14,15, 20 and 21 are the top six identified.

Conclusion:

There remains room for raising dementia awareness amongst healthcare staff regardless of training background. Social media platform might be an avenue to be utilized.

Keywords: Dementia, Health awareness, Dementia awareness, Dementia survey.

Oral presentation: OP4

Incidence of seroconversion to positivity for human immunodeficiency viral (HIV) antibody in repeat blood donors from blood donation centre at RIPAS hospital.

Nang Nway Nway Lone
Medical Officer, Blood Donation Centre, Raja Isteri Pengiran Anak Saleha Hospital, Brunei Darussalam

Introduction:

Blood transfusion is a life-saving intervention that has an essential role in patient management within health care systems. Screening

for the infections that are transmissible by transfusion is recommended as mandatory for the provision of a safe blood supply. These infections can cause chronic disease with possible serious consequences and present the greatest infection risk to recipients of transfusion.

Transfusion of Human immunodeficiency virus (HIV) infected blood is probably the most effective means of transmission of this disease. Despite intense efforts and investment to ensure safety, transmission of HIV still remains a real possibility in the transfusion service due to the fact that routine laboratory tests in the Blood Donation Centre at RIPAS Hospital rely on the detection of antibodies. This leaves an immunological window period of from 16 to 22 days, which could be minimized to approximately 9 to 11 days if nucleic acid amplification tests were employed in screening.

Objectives:

i) To estimate the incidence of seroconversion to positivity for HIV antibody in repeat blood donors from Blood Donation Centre at RIPAS Hospital. ii) To analyze the profile of blood donors who seroconverted to HIV positive from 2014 to 2018 in respect to gender, age, marital status and occupation.

Methods:

Design: A cross-sectional, retrospective survey of repeat blood donors becoming positive for HIV antibody at Blood Donation Centre, RIPAS Hospital

Subjects: HIV seroconversion cases of blood donors who donated on more than one occasion at the Blood Donation Centre at RIPAS Hospital between January 2014 and December 2018.

Results:

From 2014 to 2018, numbers of donations from repeat donors were increasing from 9,211 donations in 2014 to 11,268 donations

in 2018. Among the donors, 16 donors were found to be positive for HIV infection. Seroprevalence was found to be highest (0.07%) in the age group of 18-24 year. There were 11 donors; those fulfilled the case definition for seroconversion to positivity for HIV antibody. The estimated average seroconversion rate for infection with HIV in repeat donors was 0.21 per 1 000 person years. During 2014-2018, 1 in 4,738 donors were estimated to have come from repeat donors who had become positive for HIV antibody since the previous donation. All seroconverted donors were found to be male and most commonly found (6 donors) in the age group of 25-44 years, followed by (4 donors) in the age group of 18-24 years and 1 donor in age group of 45-64 year. Almost all donors were single but only one donor was married. 1 donor was reported to have co-infection of HIV and Syphilis.

Conclusions:

From 2014 to 2018, numbers of donations from repeat donors were increasing. With increasing number of blood donation, HIV showed increasing trend of seropositivity and seroconversion during the study period. The rate of seroconversion for positivity to HIV antibody in repeat blood donors in blood donation centre at RIPAS Hospital was 1 in 4738 repeat blood donors. This may be due to increase level of free sexual activity and high risk activities among donor population.

Keywords: Blood donation, Human Immunodeficiency Virus, HIV, Seroconversion, HIV seroconversion.

POSTER PRESENTATIONS: CLINICAL REPORTS, AUDITS AND RESEARCH

Poster presentation: PP1

Workplace stress and satisfaction in the internal medicine department and colleagues of RIPAS and PMMPMHAMB hospitals.

Justin FS Keasberry

Acute Medical Unit, Department of Internal Medicine, Raja Isteri Pengiran Anak Saleha Hospital, Ministry of Health, Brunei Darussalam.

Introduction:

Workplace stress is increasing around the world especially with infinite demands placed on a finite amount of resources in the healthcare industry. Workplace stress can be defined as the harmful physical and emotional responses that occur when there is a mismatch between the capabilities, resources or needs of the worker and the demands and time pressures of the workplace. Consequences of these stressors will have an impact on the individual performance, durability, health and wellbeing which has potential downstream departmental and organizational effects on quality and safety of patient care, productivity and lost work days. Research on workplace stressors has expanded in the recent years providing identification, management and prevention workplace stressors for the employee, department and organization as a whole.

Aim:

To explore the prevalence and effects of workplace stress amongst the internal medicine doctors, nurses at RIPAS hospital and PMMPMHAMB (Tutong) hospital.

Methods:

A prospective survey utilizing adapted questions from an American workplace survey was advertised and distributed to the internal medicine staff at RIPAS and Tutong hospital in February 2019. Nurses from AMU, and medicine wards at Tutong hospital as well as the Emergency doctors and nurses at Tutong hospital were invited to complete the survey. The domains of work content, work context, work related stress and coping strategies were assessed in the survey using a combination of a scoring system and open ended questions.

Responses were collected by April 2019 by assistants in both hospitals and analyzed using Microsoft office tools.

Results:

There was a response rate of approximately 39% from the internal medicine doctors with 55% of the total responses coming from Tutong Hospital. The highest positive scores for i) work content was from RIPASH Internal Medicine doctors ii) highest scores for work context was from the administrative staff iii) Tutong internal medicine nurses rated their workplace as most stressful. There was higher prevalence of reported sleep disturbance, severity of stress, and lack of motivation from the RIPAS staff compared to Tutong staff. Aspects of the workplace associated with stress differed amongst staff from RIPAS and Tutong hospitals.

Discussion:

This survey highlighted issues faced by doctors, nurses and administrative staff and the main differences reported in the two hospitals within the limitations of the survey data. Most responders were content in their workplace and have adaptive coping strategies including spiritual/ religious factors as well as maintaining time outside work. The main opinion on workplace stressors were centered mainly amongst two factors a) workload issues and b) the paucity of educational and research activities.

Conclusion:

This survey provides a snapshot of workplace stress amongst staff in internal medicine at RIPAS and Tutong hospitals as well as the potential factors and effects. The recognition of workplace stress symptoms is the first step in empowerment as well as education of staff on effective stress relieving and coping methods to prevent burnout from the workplace. Positive departmental, workflow and culture change will also enable workplace stress to be managed effectively and policies on workplace

stress and fatigue management is recommended.

Keywords: Workplace stress, Burnout, Health professional stress, Stress management, Surveys.

Poster presentation: PP2

Knowledge, attitudes and perceptions of general practitioners on advance care planning (ACP) and development of an intervention to implement ACP in primary health care in Brunei Darussalam: Action Research.

Shareen Foo Shih Thing¹, Shyh Poh Teo², Hjh Asmah Hj Husaini^{1,2}, Munikumar Ramasamy Venkatasalu^{1,3}

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Introduction:

Advance care planning (ACP) is proven to improve the quality of end-of-life care, reduce hospitalization and improve patient and family satisfaction. General Practitioners (GPs) play a key role in facilitating ACP discussions. This study aims to explore GPs knowledge, attitudes and perceptions towards ACP and explore the feasibility an intervention to implement ACP into the primary health care settings in Brunei Darussalam.

Materials and methods:

Mixed-methods action research as the study design consisted of 3 stages. Stage 1: Quantitative survey to explore the baseline knowledge, attitudes and perceptions of government-employed GPs. Stage 2: Intervention consisting of a pilot workshop on ACP for GPs (n=19). Stage 3: Qualitative focus group dis-

cussions on effectiveness of educational intervention and applying ACP in clinical practice.

Results:

Among the 76 GPs, 60% felt that initiating ACP would be appropriate in primary care. Majority of the participants felt that ACP should be initiated early in the disease process and continued with illness progression. However, while two-thirds have patients with chronic life limiting illness, only 7% of GPs have discussed ACP and 10% referred to palliative care services. Although participants agree that GPs are suitably placed to initiate ACP discussions, multiple barriers such as language and culture, restricted consultation timeframes and primary care setup affecting continuity of care were highlighted. There was also a need for training and collaboration with palliative care services and improvement in public awareness of ACP.

Conclusion:

While GPs have positive attitudes regarding ACP discussions, there were challenges identified with initiating ACP discussions with current knowledge, resources and support. Future research should aim to address these aspects and explore ideas of other health professionals, patients and the general public regarding ACP.

Keywords: Advance care planning, ACP, Primary health care, Action research, Implementation, Quality improvement.

Poster presentation: PP3

Poor quality of life of below-knee amputees with diabetes and renal disease in Brunei Darussalam.

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Introduction:

Lower limb amputations in patients with diabetes mellitus (DM) and chronic renal disease has been shown to have a profound impact on the quality of life (QoL) of the patients. This study was done to assess the QoL of patients with below knee amputations (BKA) and below-knee amputees fitted with prosthesis.

Materials and methods:

A cross-sectional study of 107 patients who had undergone BKA from 2015 to 2018 was conducted in Raja Isteri Pengiran Anak Saleha (RIPAS) Hospital. Complete data was available for 30 subjects. Thirty age and sex matched diabetic, nonamputee patients from the Diabetic Clinic in RIPAS Hospital served as the control group. The QoL was assessed using the RAND 36-Item Health Survey (SF-36) and the functional outcome of prosthesis-fitted below knee amputees were assessed using the Houghton Scale.

Results:

Almost all cases of BKA were a result of vascular problems related to diabetes and chronic renal disease (n=29; 96.7%). 18 (60.0%) participants were fitted with prosthesis and 15 (50.0%) reported having stump/phantom pain. QoL of participants was found to be significantly lower than that of age matched diabetic non-amputees with regards to physical functioning, role limitation due to physical health, emotional well-being, social functioning and bodily pain. The mean Houghton Score for participants fitted with prosthesis was 4.9 (SD= 2.8) suggesting low functional outcome.

Conclusion:

BKA has a negative impact on the QoL of patients, especially in terms of functionality. The



availability of prosthesis does not significantly improve the quality of life except in the physical functioning domain. Emotional well-being should be emphasized more in the rehabilitation process as this study found poor emotional well-being among participants.

Keywords: Quality of Life, Below Knee Amputation, Functional Outcomes, RAND 36-Item Health Survey, Houghton Scale.

Poster presentation: PP4

Clinical Audit on diabetes care at Endocrine Centre, Raja Isteri Pengiran Anak Saleha Hospital.

Dr Alicia Poh Wan Yan, Dr Alice Yong Moi Ling
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Introduction:

The prevalence of diabetes in Brunei Darussalam is 12.4% in 2011. Diabetes is the third leading cause of death for more than five consecutive years and up to 80% of death may be due to cardiovascular complications. The recommended targets for glycated haemoglobin (HbA1c) and blood pressure (BP) in the National Diabetes Clinical Practice Guidelines is <7.0% and $\leq 130/80$ respectively.

Aims:

In this audit, we aim to evaluate our standard of care by setting a target of achieving HbA1c and BP in 25% and 70% of cases respectively.

Methods:

All patients with diabetes who attended the clinics at Endocrine Centre in April 2019 were included. We excluded all diabetes in pregnancy. Demographic and clinical data including HbA1c, BP and diabetes management were collected.

Results:

In total, 253 patients were recruited with mean age of 54.1 years (range 17 to 93). Majority were female (54.9%), Malays (88.5%) and have type 2 diabetes (96.0%). Nearly half (46.2%) were on oral hypoglycaemic agents (OHGA) only, followed by combination of insulin and OHGA (43.1%), insulin only (9.1%) whilst 1.6% were on diet alone. Mean HbA1c was 9.04% (range 5.0-15.9), in which only 17.8% achieved target HbA1c. The mean BP was 132/78 of which 61.3% achieved systolic BP ≤ 130 mmHg and 74.3% achieved diastolic BP ≤ 80 mmHg.

Conclusion:

Only diastolic BP target was achieved. HbA1c target was harder to achieve given that we are the tertiary referral centre for diabetes and patients tend to have multiple comorbidities.

Keywords: Diabetes Mellitus, glycated haemoglobin, HbA1c, Hypertension, Diabetes care.

Poster presentation: PP5

Review of anticoagulation in PMMPHAMB Hospital, Tutong.

WL Htun, VH Chong, BI Mani, ZN Soe, MS Mathiazhagan, CB Guan

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Introduction:

Atrial fibrillation (AF) is the most common cardiac arrhythmia, and the prevalence increases with age. It is an important risk factor for stroke and systemic embolism, and anticoagulation therapy is the mainstay of treatment. Among anticoagulation therapy, warfarin remains the first line of treatment many parts of the world.



Objective:

The objective of the study is to assess the effectiveness of anticoagulation by using Time in Therapeutic Range (TTR) among the patients attending the warfarin clinics in PMMPMHAMB Hospital during the study period (Week 1 to week 26 of year 2018).

Methodology:

This is a cross sectional study during the period of 26 clinic days in year 2018. All the patients attended to warfarin clinics during the study period are included in the study. The treatment time of each INR value is calculated by using the Rosendaal method. Then TTR were categorized whether 50% of treatment time achieved the target therapeutic range or not. To find out the relationship of TTR, sub-therapeutic TTR and higher TTR with various demographic data and underlying medical condition, logistic regression analysis was conducted by using both INR target groups.

Results:

There are altogether 186 patients with total 728 visits during the study period with an average 28 patients per clinic each week. Over 90% of patients were aged 50 and above and 51% of patients were male. Nearly 90% of the patients were started warfarin for Atrial Fibrillation (AF). More than 80% of patients had hypertension and dyslipidaemia, and 40% of patients have DM. Fifty percent of patients were taking between 5 and 10 medications together with warfarin. Overall, 20% of patient never achieve target therapeutic range in both target INR categories (INR 2-3 and INR 1.8-2.5). 23% of patients achieve 50% TTR in target INR 2-3 and 40.5% of patients achieve 50% TTR when the target INR is 1.8 to 2.5. Sub-therapeutic patients were commonly seen in both target INR groups. In multivariate analysis, only use of more than 5 types of medications was associated with subtherapeutic TTR outcome in target INR 1.8 to 2.5 group. Other variables such as gender, age group, underlying medi-

cal conditions and duration of treatments are not statistically significant.

Discussions/Conclusion:

The results showed that only a small proportion of patients achieved TTR and use of more than five medications was significantly associated with not achieving target. Further studies will be required to assess the reasons for this so that measures can be implemented to improve the proportion of patient achieving TTR.

Keywords: Anticoagulation, warfarin, Arrhythmia, Atrial Fibrillation, AF, Atrial flutter.

Poster presentation: PP6

Gold Standard Framework (GSF) prognostic tool as an indicator for identifying palliative patients in primary health care settings.

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Introduction:

The World Health Organisation (WHO) recommends that palliative care be an integral part of health care at all levels of the health system, including primary care. Assessment tools are available to assist clinicians to identify patients approaching end-of-life in a timely manner, who may benefit from a palliative care approach, such as the Gold Standard Framework (GSF).

Objectives:

To explore views of primary care clinicians on

use of GSF as a tool to identify patients who may benefit from a palliative approach in primary care settings.

Methods:

Doctors from three primary health care centres were recruited to attend a training workshop on use of GSF prognostic indicators. After the workshop, they were required to identify patients seen in clinical consultations over the following month who fulfil GSF criteria. The doctors were subsequently interviewed in focus groups regarding use of the GSF tool. The transcripts were analysed using qualitative thematic analysis.

Results:

Data analysis revealed five themes: Theme 1 'Differing views of GSF tool' describes the mixed initial responses from participants during clinical application of GSF, as it required familiarisation and tailoring to primary care settings. Theme 2 'Primary Care specific challenges' describe restrictions in primary care that should be considered and managed before optimal use of GSF is possible. Theme 3 'Tertiary Care involvement' describes the need of clinical support from tertiary palliative services and the importance of integrating palliative care services with primary care. Theme 4 'Ease of prognostic indicator use' describes how a checklist approach may be designed for practical use in primary care and incorporated into electronic clinical records. Theme 5 'Palliative care registry' describes positive benefits viewed by participants in identifying patients meeting GSF criteria and proactively offering palliative services.

Conclusion:

Gold Standards Framework as a prognostic indicator in primary care settings appears feasible once the limitations in community settings are considered and palliative services integrated to meet the needs of these patients in the community.

Keywords: Gold Standards Framework, palliative care, palliation, palliative patients, prognostic factors, prognostic tool.

Poster presentation: PP7

Pain management in the last days of life: views from bereaved relatives.

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Introduction:

Terminally ill patients in their last days of life commonly suffer from pain. End-of-life care in the form of hospice or palliative care programmes has been established to help patients live their remaining days of life as comfortable as possible until they die. In Brunei, the palliative care unit was established in 2015 to collaborate with pain management unit and other disciplines and aims to help patients in need. Limited research has explored the views of relatives of patients on the pain management practices in the last days of life of the patients.

Aim:

To explore the views of bereaved relatives on pain management practices in one of the government hospitals in Brunei.

Methods:

A qualitative study utilising semi-structured interview was done among 18 relatives of patients, within a month to a year after the passing of patients under palliative care unit. Interview sessions were audio-recorded and transcribed verbatim. Research ethics approval was obtained from the joint university-hospital ethics committee.

Results:

Most relatives expressed satisfying experiences from the healthcare professionals involved in end-of-life care for the patients and themselves. From the interview, the relatives mentioned the following topics: Patients' different ways of 'Communicating the pain'; 'Knowledge and attitudes of healthcare professionals on pain management', in regard to their pain assessment skills, their availability in the wards, and provision of spiritual care; and lastly, relatives' satisfaction with end-of-life care related to good and pain-free deaths, and the dignity of loved ones being preserved.

Discussion:

Barriers were identified among patients that hindered their ability to verbalise their pain, such as limited speech abilities, reluctance to self-report, and deterioration of health status, that lead to under-assessment of pain and consequently, ineffective management of pain. Healthcare professionals have opportunities to improve on pain management of patients through education and collaboration with the pain management unit, as well as to achieve excellent outcomes on the end-of-life care for the satisfaction of the patients' relatives.

Conclusion:

Relatives in this study had difficulty in identifying pain in patients with disabilities. While relatives had satisfactory experiences, healthcare professionals still have space to improve the needs (physically, psychosocially and spiritually) of both patients and relatives, especially near the end of life, as it reflects the overall satisfaction of the relatives with the services in the hospital.

Keywords: End of life, terminal, terminally ill, bereavement, pain, hospice.

CASE REPORTS PRESENTATIONS

Case report presentation: CRP1

Cryptococcal nephropathy in an immunosuppressed host. A first experience for infectious diseases unit in Brunei Darussalam.

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Abstract:

Cryptococcosis amongst HIV patients most commonly present as a subacute meningitis or meningoencephalitis and are usually caused by the fungus *Cryptococcus neoformans* which enters the body through the lungs. The majority of cases are observed amongst patients with CD4 counts of <50 cells/ μ L. There is little published data on kidney involvement in cryptococcosis. Available data are mainly based on anecdotal case reports experienced by centres outside of Brunei. The exact pathophysiology of kidney involvement in cryptococcosis remains unclear.

I report a case of a 42 year-old Bruneian male, who was diagnosed with immunosuppressive disease in 2015, with history of being a treatment defaulter in 2015 - 2016. He was found to have impaired renal function test prior to his scheduled appointment and thus admitted to hospital for work-up. He was symptomatic with vomiting, diarrhoea and loss of appetite. On assessment, he was afebrile but intravascularly hypovolaemic with dry mucous membranes. His vital parameters were normal with BP111/78mmHg, heart rate of 81 bpm. The rest of his physical examination was unremarkable. His Creatinine in μ mol/L was monitored daily, showed accelerated progressive renal impairment peaking to 1101.6 from his normal baseline of 96.9 in μ mol/L. Nephrologists were involved, who arranged a renal biopsy after urine yielded non-

specific proteinuria and ultrasound KUB showed no obstructive uropathy. Renal biopsy histology unexpectedly came back as Cryptococcal Interstitial Nephritis. He was treated with IV Amphotericin 4mg/kg q24hourly for 6 weeks, then oralized to maintenance Fluconazole 200mg OD on discharge. His Creatinine gradually recovered allowing timely discharge from hospital with a creatinine value of 225.4umol/L.

This case hopes to increase awareness of this uncommon but potentially reversible cause of progressive renal impairment particularly in the immunosuppressed host. When properly recognized and treated, recovery is possible but the possibility of post-inflammatory renal impairment requires continued monitoring.

Keywords: Cryptococcosis, nephropathy, HIV, Interstitial Nephritis, renal impairment.

**Case report presentation: CRP2
Erythema marginatum presenting as mild anaphylaxis to insect bite.**

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Abstract:

A 36-years old British man presented to the Emergency Department (ED) with non-itchy rash over his face, upper chest, back and both shoulders. He had no previous medical history and had just moved to Brunei in the preceding three months. He had woken up the day before with burning sensation over the scalp that he attributed to an unknown insect bite. On the day of presentation to ED, he woke up with swelling over face, upper trunk and forearm with tight sensation of throat. He was treated with intravenous hydrocortisone and fluids. He reported similar symptoms after an

insect bite in the lower leg when he first arrived in Brunei but symptoms then were less prominent and subsided after a course of oral steroids and anti-histamine prescribed by a General Practitioner. Clinically, he was not in anaphylactic shock. He had multiple wavy rings of raised plaque with erythematous margin and flat pale center over his scalp, upper chest and both shoulders. There were no insect bite marks elicited. A diagnosis of Erythema Marginatum (EM) was made. However, EM is often non-itchy or painful and usually takes a course of fading in and out. Although such rash is characteristic of rheumatic fever, it can rarely be a feature of allergic reaction to medications and insect bites. It can also be a skin symptom of Hereditary Angioedema. He was diagnosed as EM secondary to insect bite and was treated with oral prednisolone, resulting in complete resolution of the rash the next day.

Keywords: Anaphylaxis, rash, erythema marginatum, angioedema.

**Case report presentation: CRP3
Cute but deadly: Anaphylactic shock following Slow Loris bite.**

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Abstract:

Nycticebus coucang or Asian Slow Lorises are rare venomous primate, mostly found in South East Asia. Their venomous bite on humans can potentially lead to fatal anaphylactic shock and even death. To date, limited publications has been made on the effects of its bite on humans. This is a case report documenting a presentation of an anaphylactic shock following a Slow Loris bite.

A 45 years old Indonesian man was fruit-picking in his backyard when he encoun-



tered a slow crawling animal amongst the trees. He was suddenly bitten on his right thumb. About 45 minutes later, he was found unwell and was promptly brought to the Emergency Department. He presented with severe abdominal pain, chills, rigors, giddiness, shortness of breath and loose watery stool. He was sweating profusely, hypotensive and had thready pulse. He was treated for anaphylactic shock. His condition improved significantly after 72 hours and he was discharged well.

Slow Loris have venomous bites which can be as deadly to humans as cobra bites, yet not much is known on this animal and the toxicity of its bite. The animal access its toxin by licking a gland under its arm, and the secretion is activated by mixing with saliva. No antidote is known. Early recognition can improve management and avoid mortality. This case report aims to increase awareness amongst clinicians on this primate.

Keywords: Slow Loris, animal bite, envenomation, anaphylaxis.

**Case report presentation: CRP4
Acute severe asthma: Prompt treatment saves lives.**

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Abstract:

Acute severe asthma is a medical emergency that may result in high morbidity and mortality. Globally, over 180,000 people died from asthma each year. This is a case report of an acute severe asthma presentation.

A 64 years old man, with history of childhood asthma and non-smoker for 30 years was seen 7 days ago in the Primary Health Care with cough, cold and fever. He

was diagnosed as asthma with upper respiratory tract infection and was prescribed salbutamol inhaler with no follow up. He presented to the Emergency Department, with sudden onset of breathlessness for the last 3 hours. He was unable to complete sentences, tachypnoeic, had severe accessory muscle involvement, hypoxic with SpO₂ of 65% in room air and had bilateral expiratory rhonchi with prolonged expiration. He was promptly treated in the resuscitation room and given repeated bronchodilator nebulisers, hydrocortisone and magnesium sulfate infusion. Although oxygenation improved, he looked more exhausted and drowsy and arterial blood gas showed Type II respiratory failure. He was intubated, ventilated and was admitted to ICU. He responded well to treatment, extubated after 7 days and discharged after 14 days with medications and an asthma action plan. He has since been doing well.

Acute severe asthma can quickly develop into life-threatening status asthmaticus despite standard treatment. Status asthmaticus has a good prognosis, if appropriate therapy is administered. A delay in initiating treatment is probably the worst prognostic factor. It is a medical emergency that requires immediate recognition and treatment.

Keywords: Asthma, medical emergency, status asthmaticus.