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The Internal Medicine Symposium 2015 with a theme **'Leading Internal Medicine to Best Patient Care'** was held on the 22nd March 2015 (Sunday) at the Lecture Theatre, Ministry of Finance, Brunei Darussalam.

A review of hypertension management in Maura Health Centre, Brunei Darussalam

Sajjad KHAN, Ruzanna JOHARI, Mei Chien SEIT
Muara Health Centre, Ministry of Health,
Brunei Darussalam

ABSTRACT

Introduction: Hypertension is becoming the major cause of death and disability, even though it is one of the modifiable risk factors for cardiovascular disease (CVD). In Brunei, hypertension is the 2nd leading cause of outpatient morbidity, and the 5th leading cause of mortality in 2012. The aim of this study was to review the management of hypertension amongst patients based in Muara Health Centre.

Objectives: To determine whether: 1) CVD risk of patients are assessed. 2) Patients with CVD risk of >20% are offered statin therapy. 3) Patients with treated hypertension have a clinic blood pressure target set to below 140/90 mmHg if aged under 80 years, or below 150/90 mmHg if aged 80 years and over. 4) Patients with resistant hypertension who are receiving 4 antihypertensive drugs and whose blood pressure remains uncontrolled are referred for specialist assessment.

Materials and Methods: Data from 300 patients with hypertension aged between 18 to 80 years old was collected retrospectively from 1st October to 31st October 2014. Exclusion criteria included patients with chronic kidney disease, patients from other catchment area, patients discharged from other health centres or physicians' clinics within a year, patients who had defaulted treatment for more than one year, and pregnant women.

Results: Only one (0.3%) patient had CVD risk assessment. Out of the 82 patients with CVD risk of more than 20%, only 55 patients (67.1%) had statin therapy. There were 238 (79.3%) patients with good control of their clinic blood pressures. There were 11 (3.7%) patients who were receiving 4 or more antihypertensive drugs and whose blood pressure were still uncontrolled. However, none of them was referred for further specialist assessment.

Conclusion: We had only managed to achieve one objective in the management of patients with hypertension, which is maintaining blood pressure of patients within targeted limits. Calculation of CVD risk is not being performed or documented as often. Some patients have not been started on statin therapy despite their high CVD risk. Furthermore, specialist advice is not sought urgently for patients with resistant hypertension. Overall, the quality of care for the management of hypertension identified in this review is less than satisfactory, which may affect morbidity and mortality of patients.

Clinical experience of hypertrophic cardiomyopathy at RIPAS Hospital

Bee Ngau LAU, Nazar LUQMAN, Sofian JOHAR
Division of Cardiology, Department of Medicine, RIPAS Hospital, Brunei Darussalam.

ABSTRACT

Introduction: Hypertrophic cardiomyopathy (HCM) is defined as the presence of left ventricular hypertrophy with a maximal wall thickness of at least 15mm in the absence of other cardiac or systemic disease known to cause hypertrophy. It is autosomal dominant with mutations in cardiac sarcomere protein genes. The distribution of hypertrophy can be either segmental or diffuse. The clinical spectrum vary between asymptomatic to sudden death, syncope, heart failure and embolic stroke. The underlying pathophysiology include abnormal coronary microvasculature leading to mismatch between left ventricular mass and coronary flow, myocardial ischaemia, left ventricular outflow obstruction, diastolic dysfunction, atrial fibrillation, mitral regurgitation and myocardial fibrosis creating a potential for arrhythmic substrate. The objective of the study is to describe the clinical experience of HCM at RIPAS Hospital.

Materials and Methods: From March 2011 to March 2015, patients who had ECG and/or echocardiographic findings suggestive of or consistent with HCM were included in the study. Echocardiographic examinations were performed in all patients. Cardiac MRIs were performed to confirm the diagnosis, and to further define the extent and severity of myocardial hypertrophy, and to evaluate for presence of myocardial fibrosis. 24-hour Holters and electrophysiological studies were done to evaluate for arrhythmias and risk of sudden death respectively, and exercise treadmill tests were done to evaluate for abnormal blood pressure response to exercise. The HCMRISK-SCD risk calculator (http://doc2do.com/hcm/webHCM.html) incorporating 7

major clinical features (age, maximal left ventricular wall thickness, left atrial size, maximal left ventricular outflow tract gradient, family history of sudden death, non-sustained ventricular tachycardia, and unexplained syncope) was done retrospectively to determine the 5-year risk of sudden death.

Results: There were 23 patients with HCM (mean age: 51.3 ± 12.0 years; 78.3% males). 16 patients were asymptomatic at evaluation and diagnosis. Among symptomatic patients (n=7); palpitations, atypical chest pain, exertional dyspnoea and giddiness. None had syncope or prior history of cardiac arrest. Family history; included premature sudden death (n=3) and HCM (n=5, including 2 pairs of siblings). ***EVALUATION;*** ECHO/Holter characteristics: maximal left ventricular outflow tract gradients of at least 30mmHg (n=3), non-sustained ventricular tachycardia (n=3, NSVT), maximal left ventricular wall thickness at least 30mm (n=2), and exercise-induced hypotension (n=1). Left atrial size was enlarged (>40mm) in 7 patients. 15 patients had segmental hypertrophy (asymmetrical septal hypertrophy n=9 and apical hypertrophy n=6), 7 patients had myocardial hypertrophy in more than 1 myocardial segments. Among patients with MRI, 12 patients had myocardial fibrosis in the hypertrophied segments (extensive fibrosis n=10, mild fibrosis n=2), and no fibrosis in the hypertrophied apical segment (n=1). The calculated 5-year risk of sudden death was <4% in 11 patients (48%), ≥4% and <6% in 1 patient, and ≥6% in 1 patient. Electrophysiological studies were done in 9 patients; 5 (4 asymptomatic, and 1 symptomatic) had negative electrophysiological testing and 4 had positive testing. Off these 4 positive patients, none of them had syncope, the maximal left ventricular wall thickness was less than 30mm but all had extensive myocardial fibrosis in the hypertrophied segments on cardiac MRIs. Among those with Holter testing; 2 were asymptomatic (calculated 5-year sudden death rate for one was 2.03%), 1 had giddiness with no spontaneously occurring VT (calculated 5-year sudden death rate: 1.4%), and 1 had both palpitations and documented NSVT on 24-hour Holter monitoring (calculated 5-year sudden death rate 3.91%). ***TREATMENT:*** Of the 4 patients with positive electrophysiological testings, 3 patients had implantable cardioverter defibrillators (ICDs), and 1 asymptomatic patient had declined ICD due to personal reason. 1 symptomatic patient who had palpitations and documented non-sustained ventricular tachycardia on 24-hour holter monitoring had ICD for secondary prevention (calculated 5-year risk of sudden death rate: 3.52%). 1 symptomatic young patient deemed to be at high risk for sudden death (5-year risk of sudden death: 9.93%) declined ICD implant due to financial reason. ***Follow up*:** During mean follow up of 16.3 ± 12.3 months; 2 patients had atrial fibrillation, 1 patient developed systolic heart failure and had required biventricular ICD which was upgraded from a dual-chamber ICD. 3 patients had spontaneously occurring VT (13%). One patient whose calculated 5-year risk of sudden death was intermediate (3.91%) had appropriate ICD shock therapy for ventricular tachycardia (arrhythmic event rate: 4%). None of the patients had syncopal attacks, sudden death or embolic strokes from atrial fibrillation. None had inappropriate shocks.

Conclusion: In our small cohort of patients with HCM, the clinical course was variable ranging. The majority of calculated 5-year sudden death risk were categorised as low risk. Electrophysiological testing is appropriate for risk stratification of sudden death. The extent of myocardial fibrosis did not seem to predict inducibility of electrophysiological testing.

Physician home visit in Brunei

Sik Kim ANG and Yin Ping LIEW
Department of Internal Medicine and Department of Renal Medicine, RIPAS Hospital,
Bandar Seri Begawan, Brunei Darussalam

ABSTRACT

Background: Physician home visits (HVs) are an important model of care for the homebound. This is a descriptive pilot study of a physician HVs for the homebound older adults who have difficulties accessing healthcare services in Brunei. The objective of this study is to describe the complexity of homebound clients in Brunei.

Materials and Methods: Home healthcare nurses identified clients who required ambulance services to attend outpatient clinic for the physician HVs. Demographic and clinical data were collected prospectively from a standardized physician home visit notes from June 2009 to August 2012. Statistical analysis was undertaken using Microsoft Excel and SPSS Version 16.0. Categorical data were presented as frequencies using percentages and continuous data as mean or median.

Results: There were 44 HVs made during the study period. Thirty-seven (84%) HVs were made to homebound older adults. Thirty-two (73%) were first time visits. Most patients were Malays race (89%), 50% were woman. Mean age was 74±15 years (Median 76 years). Each had a median of 4 documented medical conditions, most suffered from cerebrovascular accident (64%) and hyper-

tension (59%). They had a median of 6 medications. All were dependent on their ADLs and IADLs; 24 (55%) has employed caregiver. Twenty-three (52%) patients were on artificial feeding, 15 using nasogastric tube and 8 had percutaneous endoscopic gastrostomy. These clients were mostly bedbound (86%), 19/43(44%) have pressure ulcers. The physician reviewed and prescribed all medications, addressed an average of 5 care plans during each visit. The median duration of each home visit was 38 minutes.

Discussions and conclusion: Physician HVs is a supplanted but an essential healthcare for the homebound clients. This pilot study described the complexity of homebound clients, similar to nursing home residents, bedbound and dependent. They have multiple co-morbidities and psychosocial issues. The care of this cohort of homebound clients required an integrated care approach similar to an established medical home healthcare service utilising an interdisciplinary team model. Even though HVs are time-consuming, this can be reduced with an effective interdisciplinary team. We believe that physician HV model of care has potential to provide high quality, cost effective care to the homebound clients.

An experience with Nurse led PEG service in RIPAS Hospital

Saima Javed PARACHA, Rusanah SIA, Vui Heng CHONG
Division of Gastroenterology and Hepatology, Department of Medicine, RIPAS Hospital, Brunei Darussalam

ABSTRACT

Introduction: Percutaneous Endoscopic gastrostomy (PEG) is the placement of a percutaneous gastrostomy tube with the aid of an endoscope. It was first described in 1980 by Gauderer and Ponsky and is now increasingly used for long term assisted feeding. It has been estimated that around 100,000-125,000 are performed annually in United States. The indications for gastrostomy insertion include mainly stroke, chronic neuromuscular disease and head and neck cancers. It is generally a safe procedure and procedure related mortality is less than 1%. In RIPAS Hospital, we introduced a PEG nurse led service in 2011. The aim of our study was to report our experience with nurse led service.

Material and Methods: A retrospective review was performed for all the patients referred for PEG placement to Gastroenterology unit RIPAS Hospital. Demographic, clinical and biochemical data were analysed.

Results: There 98 patients who underwent PEG by the Pull method. The mean age of the patients was 61 years and 69% were men. The indications were stroke (45%), head and neck tumors (20%), neurodegenerative disease (12%), head trauma (9%), others (14%). 65% have comorbidities like HTN, DM and IHD and most of them referred from neurology, neurosurgery, and OMF. The mean duration time for follow up was 204 days. Average waiting time for having PEG was 31 days. All patients received prophylactic antibiotics and our complication rate was 4%. The overall mortality rate was 14%.

Conclusion: PEG is safe and minimally invasive procedure with low procedure related mortality and acceptable complication rates. The overall mortality rates are high because of underlying diseases.

Use of Bone Mineral Density (BMD) assessment in Brunei Darussalam and its referral sources

Arrianne PADUA, Amalina Adilah ABDULLAH, Khayatul Noorul Amyleen YAHYA, Nabilah SUHIP, Rosafiza Ima Elieyana AZAMAN, Siti Norza'aemah JAMIL, Siti Nursaleha JABAIR, Kian Chee LIM, Ketan C PANDE
Department of Radiology, Department of Orthopaedics
Raja Isteri Pengiran Anak Saleha (RIPAS) Hospital, Negara Brunei Darussalam

ABSTRACT

Introduction: Osteoporosis is recognised as a major problem of health care and BMD assessment using Dual Energy X-ray Absorptiometry (DEXA) is considered as a gold standard in its diagnosis. It is recommended for screening of subjects and to monitor response to treatment. Clinical practice guidelines from various learned societies are available for use of BMD testing. The purpose of this analysis was to study the referral pattern for BMD testing in Brunei Darussalam with an aim to optimise its use, increase awareness and refine indications for its use. We also undertook detailed analysis of patients referred from Orthopaedic clinic in 2013-2014.

Material and Methods: DEXA has been available in RIPAS Hospital since April 2009. It is installed in the Department of Radiology and scans are done once a week. The data extracted from the referral form is stored in a departmental computer database. This information was used to obtain the total number of patients undergoing DEXA from 2009 to 2014 with their age, sex and source of referral. Additional information was available for patients referred from the Orthopaedic clinic in 2013-2014. The T-score of BMD is expressed as mean ± SD. The statistical analysis was done using SPSS version 17.0.

Results: From 2009 till 2014, the total number of patients undergoing DEXA was 171, 146, 159, 131, 86 and 127 respectively. The ratio of men to women assessed during the study period ranged from 1:4.3 to 1:13.6. Maximum numbers of patients were in the 6th and 7th decade of life. The most common sources of referral were Rheumatology, Endocrine, Orthopaedic and PHY clinic. A total of 51 patients (Male 7, Female 44) were referred from the Orthopaedic clinic in 2013-2014. The most common reason being osteoporosis seen on radiographs (n=16), fragility fracture (n=8) and postmenopausal status (n=7). The lumbar spine BMD T-score in patients with fragility fracture and radiological osteoporosis was -6.5 ± 1.4 and -4.6 ± 0.3 -respectively. The BMD T-score at lumbar spine and hip in patients referred with fragility fracture and radiological osteoporosis was significantly lower than those referred for other indications.

Conclusion: Compared to the international recommendations and the likely number of subjects at high risk of osteoporosis, BMD testing is underutilised in Brunei Darussalam particularly in men. Efforts should be directed to identify high risk patients who would benefit from BMD testing from various sources of referral particularly those identified in this study. Orthopaedic patients with fragility fractures and radiological osteoporosis have lower BMD T-score.

Patients with Dengue Infection: Experience of RIPAS Hospital

Yeu Ting CHEW, Siti Rozana ABDUL HAZIZ, Haslinda HASSAN, Md Arif ABDULLAH, Vui Heng CHONG
Acute Medical Unit, Department of Internal Medicine, RIPAS Hospital Brunei

ABSTRACT

Background: Dengue infection is common in the tropic and is a perennial problem, worst during the raining season. It is still associated with significant morbidity and even mortality. Manifestations range from mild dengue fever to severe haemorrhagic dengue syndrome. To date, there has been no study looking at the clinical manifestations of dengue in Brunei Darussalam. This study looked at the characteristics of patients admitted with dengue infection.

Methods: Retrospective study of 50 patients with serologically confirmed dengue infection admitted into RIPAS Hospital between 11th June 2014 and 4th March 2015 were analysed.

Results: The mean age of patients was 34.9 ± 14.7 years with a gender ratio of 1.9:1 (male: female). Majority were local Malays (70%) followed by South Asians (14%). Presentations were fever (100%), blanching rash (86%), myalgia/arthralgia (82%), nausea/vomiting (74%), anorexia (74%), headache (52%), diarrhoea (38%) and sore throat (20%). Bleeding was seen in 40%; gum bleeding (10%, haematuria (7%), epistaxis (4%), haematemesis (2%) and ecchymosis (1%). Laboratory investigations revealed 92% had thrombocytopenia of less than 150 x 10^9/L and 82% had both thrombocytopenia and neutropenia. 56% had hepatic injury (transaminitis of 3-6 times upper limit of normal) and 24% had acute kidney injury (serum creatinine >1.5 x from baseline). The mean onset of thrombocytopenia was 4.4 ± 2.2 days, in cases where one normal platelet count preceded the onset of thrombocytopenia (n=10). The average days to nadir was 6.5 ± 1.3. The average recovery to normal prior to discharge from nadir was 2.4 ± 0.5 days (n=11). The average platelet count at nadir was 50 ± 40 x10^9/L with a lowest count of 7 x10^9/L. The mean platelet count on discharge was 131 ± 94 x10^9/L with a large variation where platelet count was as low as 29 x10^9/L on discharge. The average duration of illness prior to admission and admission were 4.9 ± 2.0 and 4.8 ± 1.7 days. There were no death in our study.

Conclusions: Dengue infection is usually self-limiting however close monitoring is important in order to identify early and manage the serious manifestations such as haemorrhage and shock

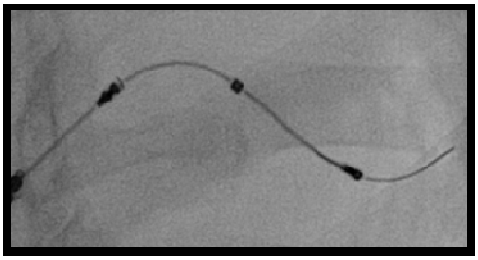
Early experience with Attain Stability, a new Active Fixation LV Lead

Sofian JOHAR and Nazar LUQMAN
Department of Cardiology, RIPAS Hospital and GJPMC, Brunei Darussalam

ABSTRACT

Background & Objectives: CRT (cardiac resynchronisation therapy) is a well established therapy which reduces morbidity and mortality in selected patients with heart failure. CRT response depends on patient selection and placement of the LV lead at an optimal position. Currently this is limited by vein anatomy, lead size, diameter and number of pacing electrodes. Pre-shaped designs to prevent dislodgement are also available. There is a potential need for an active fixation lead similar to screw-in leads for the right ventricle or right atrium to reduce the risk of lead dislodgement or micro-dislodgement and avoid phrenic nerve stimulation by precise placement of the pacing electrodes. Such a novel active fixation LV lead (Attain Stability 20066, Medtronic, Inc.) has recently been approved and launched in South East Asia. We wish to share our initial experience with this novel active fixation LV lead, soon after its initial launch in South East Asia.

Methods: Selection of patients for CRT was based on standard practice. Medtronic active fixation lead 20066 was used in 6 consecutive patients. This lead has a small side helix that is located before the proximal electrode. The pointed tip of the helix is projected in such a way that rotation of the lead



Active Fixation LV lead.

should catch the adjacent tissue and thus screw in the lead. At the end of helix there is a stopper to prevent lead damage if over screwed. Once the optimum site was identified, the lead was introduced and recommended maneuvers applied for lead fixation. The tip was freely mobile and not wedged in a small branch and the tip of a standard guidewire was allowed to protrude from the lead tip. Clockwise rotations were applied to the proximal lead body until no further lead rotation was possible and recoil noted. Finally push and pull maneuvers were used to test stability. Once fixed, pacing parameters were tested and the procedure was completed as per usual.

Results: Six patients underwent successful implants using Attain Stability 20066 active fixation LV lead. In the first patient the lead fixation took 10 minutes but dislodged after 52 min. 14 minutes were required for refixation. In the second patient dislodgement occurred after 24 hours. A new lead was used and fixed at the same site as before, only this time more vigorous lead rotations and push-pull tests were used to confirm fixation. For the subsequent implants the technique was altered. A transvalvular insertion tool (TVI) was used in the hemostatic valve during rotation of the lead so that the torque was easily transmitted to the tip and to allow better tactile feedback during push-pull tests. There were no further dislodgements in the subsequent 4 patients. The average time for LV lead placement was 18.1 min (range 5 – 35 min). The selected vein size varied from 5-10 F and areas of phrenic nerve stimulation could be avoided in 2 patients while using the same vein. In one patient pacing parameters could be improved through a more proximal position where passive fixation leads were unlikely to achieve a stable position.

Conclusion: The Medtronic Attain Stability 20066 active fixation LV lead uses a novel fixation mechanism to allow pacing from an optimal site, avoid phrenic nerve stimulation and overcome dislodgement issues. It does have a short learning curve. Certain tricks need to be learnt to improve success. Use of a TVI while the lead is rotated is beneficial.

Management of hypertension: auditing the practice

Mohammad NOH, Sofian JOHAR, Shuaib SIDDIDUI, Moncy OMEN
Division of Cardiology, Internal Medicine RIPAS Hospital.

ABSTARCT

Introductions: Hypertension is one of the major cause of premature morbidity and disability in Brunei Darussalam. Physicians largely involved in its comprehensive and continuing care both in community and hospital settings. This study aims to assess the adequacy of hypertension management care in RIPAS Hospital through a medical audit.

Methods: Retrospective audit was performed on the records of patients who attended the hypertension clinics in November 2014. The adequacy of Hypertension management was assessed especially in the three main domains of hypertension management care which are its structure, process and outcomes using agreed criteria and standards.

Results: There were total of 41 patients where 61% were male with the mean age of 54 years old. Standards achieved included smoking status recording (7%), lipids status recording (97%), height recording (2%), weight recording (14%), blood sugar monitoring (100%) fundoscopy recording (21%), ECG results recording (71%) and attaining the latest blood pressure equal and below of target standard (61%). Mean blood pressure attained was systolic 140mmHg and diastolic of 80mmHg.

Conclusions: Laboratory monitoring in hypertensive patient achieved good standard however there were inadequacies recording in few criteria in the process domain especially in smoking status, BMI and fundoscopy recording. Implementing these changes for better monitoring and re-auditing the practice is recommended.

An audit on the use of antibiotics on clean elective procedures done under local anesthesia, and the rate of subsequent surgical site infection

Lee Shi YEO and Khoo Guan CHAN
Department of Maxillofacial, Plastic and Reconstructive Surgery, RIPAS Hospital, Brunei Darussalam

ABSTRACT

Background: Clean surgical wound is defined as elective, non-emergency, non-traumatic, wound that is closed primarily, with no acute inflammation, and no break in technique; and where the respiratory, gastrointestinal, biliary and genitourinary tracts are not entered. There are currently no published large, randomised controlled trials measuring the effectiveness of prophylactic oral antibiotics. Usage of antibiotic prophylaxis varies greatly from surgeon to surgeon. Generally, in large series studies, antibiotics prophylaxis is not indicated for non-inflamed skin involving uncontaminated wounds. Currently there is no guideline on antibiotic use for clean elective procedures done under local anaesthesia in our department.

Objectives: To audit the use of antibiotics on

clean elective surgical procedures done by a single surgeon under local anaesthesia; and to determine the rate of surgical site infection (SSI) for patients that did not receive any antibiotics.

Method: This is a retrospective audit for the duration a 12 months period. Our inclusion criteria are all clean elective LA procedures done in the clinic and done primarily a single surgeon. All ulcerated, infected, and traumatic cases were excluded.

Results: The total number of subjects included in the study was 34; 12 female and 22 male. The average age was 50 years old (10 to 98). The procedures done included excision of skin lesions and minor subcutaneous lesions in all regions of the body. Of all 34 patients, only 2 received antibiotics. Both cases are excision of lip lesion. However, there are 3 other patients with excisions of lesions on the lip that did not receive antibiotics. All 3 did not get wound infection. The rate of SSI in clean elective procedures in my audit is zero for all 34 patients. The finding is in keeping with larger studies of similar nature. The most common risk factor is diabetes (15%), followed by smoker (6%).

Conclusions: In this audit, the compliance of non-antibiotic use in clean elective surgery is good (32 out of 34). The rate of SSI is zero, but it should be noted that the number of subjects is also quite small.

Acquired Haemophilia A: a case report and literature review

Md Herollenienor Felah HUSSIN and Muhd Arif ABDULLAH
Department of Medicine, RIPAS Hospital, Brunei Darussalam

ABSTRACT

Acquired factor VIII deficiency is a very rare bleeding disorder and can be life threatening and most physicians are not aware of it. This disorder should be suspected if a patient with no prior history of bleeding presenting with spontaneous bleeding and unexplained prolonged activated partial thromboplastin time (aPTT). We report a case of a 73-year-old man who presented with spontaneous bleeding associated with acquired Factor VIII deficiency. This patient presented with spontaneous haematoma of the right shoulder and the left thigh. Abnormal investigation included anaemia (haemoglobin of 7.8g/dL) and prolonged aPTT of 75.1 sec (normal range of 25.6-41.5 sec), prothrombin time 11.7 sec (normal range 10.5–13.5 sec) and INR of 1.04 (normal range of 0.9–1.5). 50% correction showed partial correction of aPTT to 44.7 sec. Factor VIII and Factor IX investigations revealed low factor VIII 3.8% (normal range of 50–150%) and normal factor IX 109.5% (normal range of 65–150%) respectively. Factor VIII inhibitor was detected at 32 Bethesda u/ml. This patient was diagnosed with acquired Factor VIII deficiency. He was treated with combination of prednisolone and cyclophosphamide.

Dysphagia in older adults

Zakia SULTANA and Sik Kim ANG
Department of Internal Medicine, RIPAS Hospital, Bandar Seri Begawan, Brunei Darussalam

ABSTRACT

Introduction: Dysphagia is usually a sign of problem with the throat or oesophagus. We present a case of difficulty in swallowing due to superior vena cava obstruction (SVCO). SVCO occurs in about 15,000 per year in the United States. Patient usually presented with dyspnea and upper trunk swelling.

Case: A 69-year-man with past medical history significant for hypertension and stage 3 chronic kidney disease (CKD), presented to emergency with difficulties in swallowing and weight loss. He was admitted to the surgical services for evaluation of presumed oesophageal cancer. He was informed of his suspected diagnosis and offered nasogastric feeding. Subsequent, fine needle aspiration of the supraclavicular lymph node showed as malignant lymphoma. He was referred to Geriatric and Palliative Medicine services. After careful history and physical examination. Revisiting the history revealed that the patient had a month history of productive cough with dyspnoea on exertion especially when eating and drinking. He was dyspnoeic with significant swelling of upper extremities and dilated chest veins. There were supraclavicular lymphadenopathies and bilateral pleural effusion. He was not able to lie flat for a computed tomography (CT) scan and planned core biopsy. Fentanyl infusion and thoracocentesis was done. A CT scan showed pulmonary embolism and confirmed a 10.5cm by 5.3cm by 10.6cm mediastinal mass causing SVCO. Family conference was held to discuss the goal of care. Unfortunately, the patient died of disseminated intravascular coagulopathy, complication of malignant lymphoma.

Discussion: Our case illustrates the importance of geriatric and palliative medicine in caring for older adults suffered from cancer. They required meticulous history and symptoms assessment and comprehensive physical examination. It is very im-

portant to control the presenting and distressing symptoms on first medical encounter while pursuing further investigation and diagnosis. Hence, it is very importance for all medical students to train in geriatric and palliative medicine.

Microscopic haematuria in older adult

Nurhazwani ISMAIL and Sik Kim ANG
Department of Internal Medicine, RIPAS Hospital, Bandar Seri Begawan, Brunei Darussalam

ABSTRACT

Introduction: Renal cell carcinoma is the most common type of kidney cancer in adults, more common in men aged 50 to 70 years old. It lacks early warning signs, only 10% will have the classic triad of flank pain, haematuria and flank mass. We present an older adult who self reported hematuria in our busy primary care clinic.

Case: A 79-year-old man non-smoker man with past medical history of hypertension, hyperlipidaemia, and gout reported an episode of resolved haematuria without any no associated abdominal pain or other urinary symptoms. Further history revealed that he has dry cough, loss of appetite and 10kg weight loss over the past months. On examination revealed a palpable mass in the right upper quadrant extending to the right flank. A computed tomography scan showed a right renal mass with nodules in both lungs. Biopsy of renal mass confirmed renal cell carcinoma. Palliative chemotherapy was given to control his disease.

Discussion: In a busy primary care clinic, older adult has a limited time slot for consultation. In spite of this, our case illustrates that it is still possible to recognise alarming signs and symptoms of hematuria, weight loss and prolonged cough. In older man with self reported hematuria, physician should further evaluate for pathology of the genitourinary tract. We believe early diagnosis can initiate discussion on advance directive and potential palliative treatment for good quality of life.

Paraneoplastic arthropathy as manifestation of pulmonary metastases in phyllodes tumour of breast

Muhammad KAMIL, Syafiq ABDULLAH, Ang Sik LIM, Mohammad Zulkhairi MOHAMAD
Division of Palliative Care Medicine, Department of Internal Medicine, RIPAS Hospital, Brunei Darussalam

ABSTRACT

Introduction: Phyllodes tumours are rare, representing only 0.5 percent of breast malignancies. They arise from fibro-epithelial component and capable of a diverse range of clinical behaviour. They behave like fibroadenoma in least aggressive forms to aggressive tumour with tendency for distant metastases. We report a case of lady with phyllodes tumour of left breast who presented with polyarthralgia as a manifestation of pulmonary metastases.

Case: A 38-year-old lady who previously in good health with no comorbidities presented with history of progressive left breast mass for four years. Biopsy confirmed malignant phyllodes which was unresectable due to locally advanced stage. She was treated with Ifosfamide and Adriamycin based chemotherapy for two cycles with neoadjuvent intension, followed by palliative mastectomy to remove the tumour (21 x 23 cm) and plastic reconstruction. She had good post-operative recovery. A follow up computed tomography scan noted a 2 x 2.5 cm right hilar lesion of lung with unknown nature. She was admitted to our service later that year 2014 with intermittent multiple joints pain of two months with occasional low grade fever, limiting her mobility and requiring frequent analgesias. She did not report any associated bowel or urogenital symptoms however she did report of mild dry cough occasionally. On examination, there were gross clubbing of both hands and swollen PIP joints of the right second third and 4th fingers with reduced range of movements. Biopsy of the lung mass was reported as metastases from malignant phylloides tumour, however the cytology examination from pleural fluid remained negative for malignant cells. A review from rheumatologist suggested an episode of polyarthritis. She was discharge well with mild joint pains off and currently undergoing chemotherapy for metastatic phylloides tumour and remained well so far as of last follow-up.

Conclusion: We report a rare case of metastatic phylloides tumour with joints manifestations.

Coexistence of anomalous right coronary artery and borderline non-obstructive hypertrophic cardiomyopathy in two deaths under dissimilar circumstances

Pemasari Upali TELISINGHE, Senarath COLOMABGE, Md Pg Bahrin PG ALIUDIN,
Department of Pathology, RIPAS Hospital,

Brunei Darussalam

ABSTRACT

A previously healthy, 39-year-old male had collapsed while playing football and was pronounced dead on admission to a local hospital. A post-mortem examination revealed a rare combination of two uncommon congenital diseases of the heart; an anomalous origin of the right coronary artery and borderline non-obstructive hypertrophic cardiomyopathy, each with a propensity to cause sudden death during physical exertion. Few months later a 51-year-old man who died following injuries sustained in a road accident also showed identical anomalies of the heart. Aetiology of sudden cardiac death (SCD) during sports is discussed with special emphasis on congenital coronary artery anomalies (CCAA) and hypertrophic cardiomyopathy (HCM).

A case report of isolated cranial diabetes insipidus in a patient with type 2 diabetes mellitus

Adibah SALLEH and Chee Kwang YUNG
Endocrine Unit, Department of Internal Medicine, RIPAS Hospital, Brunei Darussalam

ABSTRACT

Background: Polyuria is defined as passing more than 3 litres of urine per day. Both diabetes mellitus and diabetes insipidus can present with polydipsia and polyuria. But the co-existence of diabetes mellitus and diabetes insipidus is not commonly reported in medical literature.

Case: This is a case report of a 46 years old male known to have pre-existing type 2 diabetes mellitus that represented to our institution with osmotic symptoms. He had stopped taking his medications for more than a year prior to admission. His serum glucose was 38.9 mmol/L with no urine ketones and a measured osmolality of 313 mOsmol/kg. He was managed with intravenous insulin and hydration by the medical on call team with improvement of his glycaemic profile. However he persistently reported polydipsia and polyuria despite being euglycaemic. A clinical suspicion of diabetes insipidus was made in view of his symptoms and persistent hypernatraemia between 147 mmol/L and 155 mmol/L. A 24 hour input and output chart confirmed polyuria with 6 litres of urine in a 24 hour period. He did not report any history of head injury in the past, headaches or visual symptoms. He was not on any medications that would contribute to his symptoms. The serum calcium and thyroid function were normal. An overnight 8 hour fast was performed which showed a serum sodium of 146m-mol/L, serum osmolality of 302 mOsmol/kg and a urine osmolality of 312 mOsmol/kg and fasting venous glucose of 4.5 mmol/L. A water deprivation test was subsequently performed which confirmed a diagnosis of cranial diabetes insipidus.

Discussions: This interesting case highlights the importance to consider other differential diagnosis in a patient who presents with persistent polyuria and polydipsia in the setting of diabetes mellitus and, the co-existence of diabetes insipidus with type 2 diabetes mellitus.

Urethral scrotal fistula: complication from urinary catheter

Ruzita GHANI, Sik Kim ANG
Department of Internal Medicine, RIPAS Hospital, Bandar Seri Begawan, Brunei Darussalam

ABSTRACT

Introduction: Benign prostatic hyperplasia is common in older man, occurs up to 80% for those in their 70's. Unfortunately, majority will lead to urinary retention. They required insertion of urinary catheter to relieve the obstruction. We present a case of urethral scrotal fistula, a potential complication from urinary catheter.

Case: A 76-year-old man with known history of advanced dementia. He presented with fever and lethargy and abdominal examination revealed suprapubic fullness. He had urinary catheterisation but only 100mls of residual urine. His abdominal radiograph and computed tomography imaging confirmed a 7.89 cm x 6.11cm bladder calculus. Further evaluation of urine cytology and urine early morning acid fast bacilli smear were negative. He was later discharged home with urinary catheter. Three weeks later, he was readmitted with fever and family reported right scrotal swelling after change of urinary catheter with pus discharged from the urethral meatus. He was delirious and agitated, abdominal examination revealed suprapubic fullness and right scrotal swelling and noticed urinary leakage despite urinary catheter in-situ. Ultrasound of pelvis could not identify the inflated balloon of urinary catheter but noted oedematous right scrotal skin containing tiny echogenic foci lesion. An ascending fluoroscopy urethrogram showed the urinary catheter balloon inflated in the penile urethra and contrast extravasated under the skin and perineal region, confirmed urethral scrotal fistula. The patient had radiological guidance insertion of urinary catheter and drainage of the scrotal abscess.

Discussion: Urethral scrotal fistula is an uncommon but potential complication of indwelling urinary catheter (IDC). Our case highlighted the importance of evaluating urinary leakage in patient with IDC. Healthcare worker need to be competent and vigilance when changing and inserting urinary catheter. IDCs are the leading cause of healthcare-associated urinary tract infection. In older adults, it is a precipitating factor for delirium which has high morbidity and mortality. Therefore, it is important to closely monitor this frail population who required long term urinary catheterisation.

Hypoglycaemia in sarcoma

Zulkhari MOHAMAD, Muhd Syafiq ABDULLAH, Sik Kim ANG
Department of Internal Medicine, RIPAS Hospital, Bandar Seri Begawan, Brunei Darussalam

ABSTRACT

Introduction: The occurrence of paraneoplastic hypoglycaemia in patients with sarcoma is well known. There are several mechanisms proposed to account for hypoglycaemia in patients with sarcoma.

Case: An 81-year-old functionally independent woman with known history of hypertension was hospitalised for one month history of abdominal pain. On examination, there was a right side abdominal mass from right loin up to liver. Computed tomography scan revealed a big peri-liver mass compressing on the duodenum with liver and bone lesion. Fine needle aspiration cytology of the lesion showed poorly differentiated fibrosarcoma. In view of her good performance status, she was initially scheduled for a laparotomy and excision of tumour. Perioperatively, the tumour was found to be inoperable and she undergone a bypass surgery for the duodenum obstruction. Post-operatively, she never recovered and she developed recurrent hypoglycaemia despite receiving total parenteral nutrition and intravenous dextrose infusion. Her Insulin growth like factor (IGF-1) level was within normal limits. Unfortunately, she passed away due to complication of her advanced sarcoma.

Discussion: Retroperitoneal sarcoma typically produce few symptoms until they are large enough to compress surrounding structure. Presentations with paraneoplastic hypoglycaemia (non islet cell tumour hypoglycaemia) although rare is reported . In our case, we postulated that there is an abnormally increased storage and utilisation of glucose by tumour as there is no raised in IGF-1 level. In unresectable cases, treatment involves correction of hypoglycaemia, increasing caloric intake and intravenous dextrose. Steroids are reasonable treatment of choice in such setting and if hypoglycaemia persists, glucagon and growth hormone are second line of treatment in such palliative setting.

The role of brain imaging in resistant hypertension

Yee Yin LIM and Yin Ping LIEW
Department of Renal Service, RIPAS Hospital, Brunei Darussalam

ABSTRACT

Background*:* Resistant hypertension (RH) is a common medical problem in the elderly. Its aetiology is generally multi-factorial. RH has an increased risk of cardiovascular events and end-organ damage. The investigation involves extensive testing for secondary causes. Our case illustrates that workup and management can be difficult and challenges.

Case: A 61-year-old woman admitted for the evaluation of cervical dysplasia. She was referred to cardiologist for the management of RH. Hypertension was diagnosed three months ago. Her blood pressure (BP) was reasonably controlled in outpatient with systolic BP (SBP) around 130-150 mmHg on a combination of alpha-1-antagonist, beta-blocker, angiotensin II receptor blocker and thiazide diuretic. However, her inpatient BP was uncontrolled with SBP 200-240mmHg and diastolic BP 60 -100mmHg. She was slim, euvolaemic and asymptomatic. There was no neurological deficit, except for a longstanding mild right facial droop. Laboratory studies ruled out secondary endocrine causes of RH. She was instituted on a low-salt diet and supervised taking her medications. Despite maximal doses of her outpatient antihypertensives and addition of four other antihypertensive agents, her SBP remained uncontrolled at 180-220mmHg. She remained asymptomatic. Two days after commencing loop diuretic, she experienced a fall with right-sided weakness and aphasia. Her BP was 90/50mmHg. CT and MRI brain confirmed an acute cortical infarct on a background of multiple old lacunar infarcts. Her neurological deficit recovered after reevaluation of her anti-hypertensives with SBP maintained at 160. She was discharged home with six antihypertensive agents including two diuretic.

Conclusions*:* This case illustrates an unsuspected cause and effect of RH. Clinical symptoms of stroke were unveiled after hypertension was aggressively controlled. Instead of focusing on treating the BP with addition of new antihypertensive agents, it is worthwhile considering the presence of end-organ

damage i.e. stroke contributing to RH. Existing literature and guidelines do not include imaging of the brain as a routine investigation in cases of RH. Our case suggest strong consideration of brain imaging for RH.