

PM-1

PANCREATOBLASTOMA: A RARE TUMOUR

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Introduction: Pancreatoblastoma is a rare pancreatic neoplasm that is most commonly encountered in infant and young children, although rare cases have been reported in adults. They comprise less than 1% of pancreatic and periampullary tumors. The clinical presentation of these tumors are varied. It is usually a large, encapsulated mass with area of hemorrhage and necrosis or calcification. Pancreatoblastoma can present as abdominal pain, abdominal mass, diarrhea, or upper gastrointestinal bleeding but most of the time they are asymptomatic. The presenting features are highly non-specific and that may leads to diagnostic dilemmas.

Case Report: A 19-year old female presented to our hospital with history of upper abdominal pain and lump in the epigastric region for one year. Physical examination revealed a large lump in epigastric region with mild tenderness. Routine blood counts were within normal ranges. Abdominal ultrasonography revealed a large, well defined, heterogeneous mass in the region of head of the pancreas with foci of discrete calcifications. Pancreatic head was not separately identified from the lesion. The plain CT scan revealed a large soft tissue density mass lesion with foci of calcification in the head of the pancreas. Post contrast image shows heterogeneous enhancement. USG guided FNAC of the mass was done and findings was suggestive of pancreatoblastoma. Patient underwent laparotomy and resection of the mass and histopathological result was pancreatoblastoma.

Conclusion: Pancreatoblastoma should be considered in the differential diagnosis of an upper abdominal mass in a child, especially when the mass appears to arise from the pancreas or liver.

PM-2

KNOWLEDGE AND ATTITUDE TOWARDS PAP SMEAR AMONG WOMEN IN BANDAR BACHOK, KELANTAN

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Introduction: To improve the knowledge and attitude towards of pap smear among women in Bandar Bachok, Kelantan

Patients and Methods: Intervention study was conducted. A total of 66 sexually active women aged 20 to 65 years old, residing in Bandar Bachok were interviewed before and after being given health interventions on cervical cancer and pap smear. The health interventions were health talk, small group discussion and health exhibition on cervical cancer and pap smear.

Result: The percentage of women having good knowledge and attitude towards pap smear increased after the intervention program (48.5% and 22.8% increment respectively).

Discussion & Conclusions: There were some improvements in the knowledge and attitude on Pap smear after the health interventions, indicating the importance of health education to increase the public awareness on early screening for cervical cancer.

PM-3

GENDER RATIO IN UNDERGRADUATE MEDICAL PROGRAME, MEDICAL FACULTY, INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA (IIUM)

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Introduction: Historically, more men enrolled in medical schools than women. However, during the last few decades, there has been an increase in the number of women attending medical schools worldwide.

Objective: In this present study, we investigated if such gender enrolment differences occurred at our medical school.

Subjects & Method: Information was obtained from Kulliyyah of Medicine student statistics for 2006/2007 session and graduates from 2001/2002 (1st batch) to 2006/2007.

Result: Our study showed that more than half (60%) of our students are female and all students who received distinction in final year exam from 2002 till now are females although the number of males who needed to sit the supplementary examination outnumbered the females during that period.

Discussion & Conclusions: Our study indicated that feminization of medicine is a global phenomenon. A drastic shift in this ratio is now a concern in the context of workforce planning and medical school deans, chancellors, university administrators and politicians need to pay more attention to issues confronting women in leadership positions.

PM-4

COMMITMENT OF MEDICAL GRADUATES EDUCATED WITH AND WITHOUT COMMUNITY-BASED MEDICAL EDUCATION TOWARDS COMMUNITY HEALTH CARE - A STUDY FROM MALAYSIA

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Objective: This study aims to determine the community inspiration of graduates from USM verses UM and UKM, for their Community-based education (CBE) OR community oriented education curriculum (COE) program.

Subjects & Methods: The questionnaire was administered to a randomized group of 85 selected supervisors from eight ministries of health-affiliated hospitals. The data received from 62 respondents from four major disciplines was analyzed utilizing SPSS version 12.0.1.

Result: The responses from 62 supervisors were divided into 3 clusters. It was shown that the USM graduates who were taught through a CBE curriculum have performed better than the graduates from UM and UKM who followed a COE curriculum. p value (< 0.001) was highly significant and consistent with higher mean score in those variables.

Discussion & Conclusion: The graduates taught through a CBE curriculum (USM) performed better in community commitments towards patients care compared to graduates from COE curriculum (UM) and a traditional curriculum (UKM)

PM-5

THE ATTITUDES TOWARDS COMPUTER EDUCATION IN MEDICAL EDUCATION; EXPERIENCE MEANS A LOT?

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Objective: The aim of this study is to find out the attitudes of second year and final year medical students of School of Medical Sciences (SMS), Universiti Sains Malaysia towards computer education, and whether there is any significant difference between the two groups.

Subjects & Method: In October 2003, self-administered questionnaires were issued to approximately 60 second year medical students and 60 final-year medical students. Simple randomization was carried out for the selection of the participants. The timing of this research was at the end of the first semester, when second year medical students had completed their problem-based learning (PBL) sessions, and the final-year medical students had completed their last clinical rotation in the first-semester.

Result: The questionnaire was returned by 78% (n:47) second-year medical students and 88% (n=53) final year medical students. Second year medical students scored significantly higher Total Attitudinal Score as compared to final year medical students (p value <0.001).

Discussion & Conclusions: This study shows that both second year and final year medical students scored positive attitude towards computer education in the medical curriculum. Early exposure to computers prior to admission into the medical school is believed to be a big factor on students' attitude towards computer education in medicine.

PM-6

THE VALIDATION OF KNOWLEDGE, ATTITUDE AND PRACTICE QUESTIONNAIRE ON BREAST FEEDING

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Objective: The objective of this study is to examine the reliability and validity of a questionnaire on knowledge, attitude and practice of breastfeeding.

Subjects & Method: A cross-sectional study was conducted from 1st January to 28th February 2008, involving 60 female staff at Hospital Universiti Sains Malaysia (HUSM) clinics. All female staff ever having children were included in the study. A self-administered questionnaire was used. It consisted of components on knowledge, attitude and practice of breastfeeding. The questionnaire was adapted and modified from a previous questionnaire developed by a team of nurses at paediatric ward, HUSM. There were 62 items on knowledge, three items on attitude and four items on practice. Analysis was done using SPSS Version 12.0.

Results: Among 60 respondents, the mean age was 41.7 (SD 9.27) years old. 23.3% of them ever practiced exclusive breastfeeding to their babies. From factor analysis, six domains on knowledge were constructed, which were on the following: i) general and breast engorgement; ii) advantages; iii) duration, expressed breast milk, storage, Baby Friendly Hospital Initiative; iv) problems with breastfeeding; v) colostrum and frequency; vi) effective feeding and complementary feeding. The Cronbach's Alpha for knowledge, attitude and practice were 0.837, 0.722 and 0.716 respectively. Final questionnaire consisted of 56 items on knowledge, three items on attitude and four items on practice.

Discussion & Conclusion: The questionnaire on knowledge, attitude and practice has a good reliability and validity. Therefore, this questionnaire is reliable and valid to be used in other studies pertaining to breastfeeding.

PM-7

HEMOGLOBIN H CONSTANT SPRING AND HEMOGLOBIN D PUNJAB IN A FAMILY

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Introduction: Hemoglobin D is a group of rare hemoglobin variants. It differs structurally from normal hemoglobin A at 121 position on beta chain. There are several types of different hemoglobin D. The most frequent is Hemoglobin D Punjab. Here we report Hemoglobin H Constant Spring and Hemoglobin D Punjab in a family.

Case report: Our patient is a 7 month old Malay boy, the youngest out of 4 sibling and a product of non-consanguineous marriage. He was noted pallor since birth but clinically asymptomatic. He presented with bronchopneumonia and at the same time investigated for anemia. Physical examination revealed hepatosplenomegaly. Hb on admission was 3.8 g/dl, MCV 55.9 fl, MCH 14.4 pg, MCHC 25.9 g/dl and blood film showed hypochromic microcytic RBC with target cells and no overt hemolytic features. His Hb electrophoresis results showed: Hb A=64.5%, Hb A2 = 1.0%, Hb F = 8.4%, Hb Variants = 26.1% and H inclusion were seen. DNA analysis result showed a thalassemia 1 trait with hemoglobin D Punjab. His mother and elder brother (3rd child) was diagnosed to have Hb H disease with Hb Constant Spring, both from Hb and DNA analysis.

Discussion & Conclusion: Heterozygous form of Hb D Punjab is clinically silent, but coinherintance with a thalassemia may have caused chronic hemolytic anemia in this patient. The interaction of Hb D and a thalassemia needs to be further evaluated together with other factors in determining the clinical phenotype.

PM-8

HYPERFIBRINOLYSIS AND BLEEDING MANIFESTATION IN A YOUNG MAN OF UNKNOWN AETIOLOGY

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Introduction: Primary hyperfibrinolysis with bleeding is a rare condition. In clinical practice, disseminated intravascular coagulation (DIC) is the commonest cause of acquired hyperfibrinolysis . Here we report a young man who presented with features of hyperfibrinolysis confirmed by blood investigations but no known cause was found.

Case report: A 20 year old Malay male, initially presented with gum bleeding for three days and received treatment from a dentist. Later, he developed right knee swelling, huge right arm hematoma and frank hematuria. There was no significant past medical history and family history. He was referred to a general physician for further management. In the ward patient developed one episode of seizure. CT scan of brain revealed no intracranial bleeding. His hematological finding on admission revealed Hb 8.6g/dl, WCC 9.3×10^9 /L and platelets $22,000 \times 10^9$ /L. Blood film showed leucoerythroblastic features, polychromasia, occasional fragmented red cells and neutrophilia. The findings for coagulation study were compatible with DIC , however renal function test and liver function test were normal. After close monitoring and blood transfusion support, the patient improved and all initial investigations were normalized. No evidence of autoimmune disease and underlying malignancy.

Discussion & Conclusion: Unknown cause of hyperfibrinolysis needs extensive investigation and critical in the management. In this case, the hemostatic dysfunction were normalized following extensive blood support and saved the patient from further complications.

PM-9

A PILOT STUDY ON THE RELIABILITY OF THE QUESTIONNAIRE ON KNOWLEDGE AND ATTITUDE TOWARDS HERBAL MEDICINES DURING PREGNANCY

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Objective: To assess the reliability of the questionnaire on knowledge and attitude towards herbal medicines during pregnancy

Subjects & Method: A total of 50 mothers who attended postnatal clinics in Tumpat district were interviewed. The questionnaire consisted of 33 items; 16 questions for knowledge (5 areas) and 7 questions for attitude (3 areas). Item analysis was done including internal consistency reliability by using Cronbach's alpha statistic and corrected item-total correlation. The analysis identified the problem items, which were below 0.4 (below 0.2 as serious problem) corrected item-total correlations.

Result: Item analysis was satisfactory for selected items as both Cronbach's alphas were above 0.7.

Discussion & Conclusion: The questionnaire on knowledge and attitude towards herbal medicines during pregnancy was reliable.

PM-10

SOCIO-DEMOGRAPHIC CHARACTERISTICS OF METHADONE MAINTENANCE THERAPY (MMT) PATIENTS IN PASIR MAS TOWN HEALTH CENTRE, KELANTAN

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Objective: To describe the socio-demographic characteristics of Methadone Maintenance Therapy (MMT) patients in Pasir Mas Town Health Centre, Kelantan.

Patients & Method: This is a cross-sectional study involving records review of all 45 MMT patients from December 2006 to December 2007. Socio-demographic characteristics, types of drug used, factors initiating drug use and diseases related to drug use were gathered. The data was analysed using SPSS version 12.0. The numerical data were describe as mean, (SD) and categorical data in frequency and percentages.

Result: All MMT patients were male and 40% of them are from Pasir Mas district under Pasir Mas administrative area. The mean age of subject was 32.7(SD=6.6) years old, with age ranges from 20 to 49 years old. Majority of them were bachelor (66.7%), unemployed (40%) and 88.9% were with secondary school educational. Factors initiating drug used were mainly due to desire to try (62.2%) and peer pressure (31.1%). Mixed drug addiction used were seen in 77.8% of patients, mainly using opiates as a first choice of drug, 62.3% were chronic drug user with duration of 5-15 years. Infected Hepatitis C Virus was seen among 91% of subjects, 55.6% were infected with Human Immunodeficiency Virus and 28.9% were infected with Hepatitis B Virus.

Discussion & Conclusion: Methadone Maintenance Therapy has shown to improve the social adaptation and integration into the society. Preventing the social problems and diseases occurred with drug addiction in Pasir Mas will improve not only the health status of the community in Pasir Mas but also the quality of life and the impression of the state which can enhance the tourism and economic development.

PM-11

EX-SMOKER STATUS INFLUENCES THE SURVIVAL OF CHRONIC RENAL FAILURE PATIENTS

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Objective: To study the effect of being an ex-smoker on survival in chronic renal failure patients.

Subjects & Method: A retrospective record review study was conducted involving 145 Malay adults with CRF, recruited from 1st January 1993 to 31st December 2002. Additional follow-up of two years after the recruitment of the study subjects was done from 1st January 2003 to 31st December 2004. Medical records were reviewed by a single researcher. All variables of interest and patients' survival status during the period were recorded into a standard data collection form. Analysis includes Kaplan Meier survival curve with log-rank test, simple and multiple Cox's proportional hazards regression.

Result: Overall 5-year survival rate for CRF was 33.7%. Smoking status was the significant prognostic factor that influenced death in CRF. The risk of dying among the ex-smokers (Hazard Ratio (HR) =1.62, 95% Confidence Interval (CI): 1.01, 2.58) was about similar with the smokers (HR=1.90, 95% CI: 1.05, 3.44), compared to non-smokers.

Discussion & Conclusions: Survival rate for CRF in this study was low. Being an ex-smoker also reduced the 5-year survival. Effective strategies in monitoring and management of CRF patients who were ex-smokers should not be neglected as compared to current smokers.

PM-12

NURSING STUDENTS' PRECEPTION TOWARDS THE EFFECTIVENESS OF A CLINICAL FACILITATOR AT HOSPITAL UNIVERSITI SAINS MALAYSIA

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Introduction: Nursing is very challenging profession. The clinical area is a good place for nursing students to gain knowledge and good value in giving care to patient. The aid of the clinical facilitator is important for them to achieve their clinical objectives.

Objective: To explore student perception on the characteristic of an effective clinical facilitator.

Subjects & Method: This is a cross-sectional study conducted for a period of three months at the Hospital Universiti Sains Malaysia, Kelantan. The respondents were 68 nursing students from year three and four from the Nursing Program, School of Health Sciences, Universiti Sains Malaysia. Respondent's level of perception were measured using Likert scale questionnaire, which was adapted from the research done by Tang, Chou and Fang. The data obtained were analyzed descriptively using Chi Square Test.

Results: Results indicated professional competency, interpersonal relationship and personal characteristics were the key components to be an effective clinical facilitator. The respondent's perception towards professional competency (76%), interpersonal relationship (66%), personal characteristics (65%), and teaching ability (55%). However, professional competency ($p=0.045$) and teaching ability ($p=0.000$) were significant when tested with Fisher's Exact test.

Discussion & Conclusion: There were four characteristics aspects towards the effectiveness of a clinical facilitator in nursing education. The available data showed only teaching ability and professional competency. This study provided more room for improvement among teaching health professionals involved to address aspects of less importance in the future.

PM-13

THE LEVEL OF AND FACTORS INFLUENCING STRESS AMONG DEGREE NURSING STUDENTS AT THE HOSPITAL UNIVERSITI SAINS MALAYSIA

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Objective: To investigate the stress level and the stressors among nursing students in a degree program.

Subjects & Method: This was a cross sectional study done in School of Health Sciences, USM. A total of 113 nursing students from the second, third and fourth years were chosen as respondents. However, only 106 nursing students answered the questionnaire completely. Respondent's level of stress was measured using a Likert scale questionnaire adapted from the Stress Inventory. The data obtained were analyzed descriptively using Chi Square Test and ANOVA test. The result is significant if the $p < 0.05$.

Result: Stress level among nursing students was studied according to 4 factors: academic, social, financial, and utility. The high level of stress among students was caused by academic factors, responsible for 92% of students' perceived stress (40% very stress, 52% moderate stress). Academic factors included preparation for examinations, the prospect of the final exam, the course workload and doing the course assignment individually or in groups. The factors of less concern were from financial and utility. Individual items receiving highest mean scores were 'the 1700 hours finish time of the class (min 3.49, $sp = 1.2$) and the course workload (min 3.42, $sp = 1$). The limitations of this study were the use of convenience sampling and self report methods. In addition, students stress were not observed or measured. Therefore larger studies are required to support the findings in the future.

Discussion & Conclusions: Overall, academic is a major stressor among nursing student. Therefore, identification of components for this factor by lecturers and tutors are needed. This is important so that the syllabus will be planned perfectly taking in the students' ability. This action is crucial to reduce stress and negative impact among nursing students.

PM-14

KNOWLEDGE AND PRACTICE OF FOOT CARE AMONG DIABETES MELLITUS TYPE 2 CLIENTS IN HOSPITAL UNIVERSITI SAINS MALAYSIA (HUSM) KUBANG KERIAN, KELANTAN

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Objective: To access the knowledge and practice of foot care among DM Type 2 patients in HUSM.

Patients & Method: This study was a cross-sectional descriptive study. A total of 70 DM Type 2 clients who attended the Diabetic Center and admitted to selected wards HUSM were recruited in this study. Each respondent was given a self-administered questionnaire. The knowledge score and practice of foot care were calculated and analysed using Statistical Package for Social Sciences version 12.0 (SPSS).

Result: The results demonstrated that 88.6% of respondents have high knowledge of foot care. Majority of the respondents (91.4%) have poor foot care practices and foot self inspection was always practiced only by 38.6%, while 40% admitted never walk barefooted around the house. The statistical test reflected that there was a significant relationship between sex and knowledge score, in which male had higher knowledge score compared to female (p value = 0.003)

Discussion & Conclusions: This study revealed that the level of foot care knowledge is moderate among DM Type 2 clients in HUSM. The practice of foot care was also found unexpectedly low, therefore good foot care practices need to be emphasized to ensure complications can be prevented.

PM-15

PREVALENCE OF DEPRESSION AMONG HOSPITALIZED ELDERLY CLIENTS IN HOSPITAL UNIVERSITI SAINS MALAYSIA, KUBANG KERIAN KELANTAN, MALAYSIA

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Objective: To determine the prevalence of depression among hospitalized elderly patients in Universiti Sains Malaysia Hospital (HUSM)

Patients & Method: This research was conducted using cross-sectional descriptive study. A total of 60 respondents aged 60 years and above participated in this research. All the respondents were patients in HUSM. The respondents were asked to answer a set of questionnaires involving demographical data, Geriatric Depression Scale and factors that influenced depression. All the data was then compiled and analysed using Statistical Package for Social Science (SPSS) version 13. The data was analyzed descriptively (frequency and percentage). Ethical clearance and permission were obtained from Ethical and Research Committee of Universiti Sains Malaysia.

Result: Majority (65%) of the respondents were in the age of 60 to 69 years old with 53% of the total respondents being male, 81.7 % of them married and 53% with no income. It was found that 51.7% of respondents experienced depression while 48.3% were not depressed. Physical health problems that include sleeping disturbances, tiredness and difficulty in physical movement had the highest percentage with 38% of the respondents experiencing it and there is also an association between depression and physical health problems ($p < 0.05$).

Discussion & Conclusions: Depression can occur at any age. It is proven by half of the geriatric hospitalised clients in HUSM who participated in this research showing signs of depression. Moreover, physical health problem was the primary factor influencing depression. Therefore, the finding from this research plays an important role in initiating preventive measures in the future.

PM-16

DETERMINATION ON EFFECTIVENESS OF CERVICAL CANCER SCREENING; A STUDY ON THE UNDERSTANDING OF SCREENING OF CERVICAL CANCER FROM PATIENTS IN 10 HOSPITALS IN WEST MALAYSIA

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Objective: We conducted a study on cervical cancer patients to determine whether Pap smears were done within 3 years preceding the development of the cancer and their understanding on the screening of this cancer.

Patients & Method: Data on cervical cancer patients from the year 2000 to 2006 from 8 hospitals; Hospital Universiti Sains Malaysia (HUSM), Hospital Raja Perempuan Zainab II (HRPZ II), Hospital Sultanah Nur Zahirah (HSNZ) Kuala Terengganu, Hospital Sultanah Aminah (HSA) Johor Baru, Hospital Kuala Lumpur (HKL), Hospital Ipoh (HI), Hospital Pulau Pinang (HPP) and Hospital Tengku Ampuan Afzan (HTAA) Kuantan were collected. Those still undergoing treatment in 6 hospitals; Hospital Tunku Jaafar (HTJ), HPP, HTAA, HKL, Hospital Tunku Ampuan Rahimah Klang (HTAR) and Hospital Umum Sarawak (HUS) were given structured questionnaires.

Result: There were 1639 cervical cancer patients, age between 25-85 years seen the 8 hospitals. The percentage of patients who have had pap smears within 3 years prior to cancer development was; HKL, 7.0% (34/486), HSA, 1.52% (4/263), HRPZ II, 5.88% (13/221), HTAA, 11.5% (22/191), HUSM, 8.92% (14/157), HPP, 6.71% (10/149), HSNZ, 3.8% (4/104), and HI 7.35% (5/68). 112 patients in the 6 hospitals responded to the questionnaires. 56.2% of them had none or only up to primary school education. Among the reasons for not doing Pap smear were "Never heard about Pap smear" (81.1%), "afraid to do it" (24.3%), "Shy" (21.6%), "not important" (16.2%) and "No female doctor" (13.5%).

Discussion & Conclusions: A large number of cervical cancer patients did not have Pap smears within 3 years preceding to cancer development. Majority of them have not heard of this screening test.

PM-17

EFFECT OF CONTINUOUS EXERCISE ON PLATELET ACTIVATION COAGULATION AND FIBRINOLYTIC PROFILE OF HEALTHY MALE

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Objective: To investigate the effect of continuous exercise on the platelet activation, coagulation and fibrinolytic profile of healthy male

Subjects & Methods: Sixteen healthy males, aged 19-35 years were enrolled into the study. Blood sample was withdrawn for platelet activation, coagulation and fibrinolytic profile as the baseline investigations. Then training group performed continuous exercise at 60% VO_2 max for 45 minutes 3 times per week for 12 weeks. The effect of the 12 weeks program was assessed by the repeated blood sampling. Both baseline and post training blood profiles were evaluated.

Result: Most volunteers have shortened prothrombin time ($p < 0.05$) with mean value at baseline and post training of 12.89 ± 0.57 and 12.34 ± 0.68 second respectively. Mean value of gated percentage of platelet activation marker CD62p and PAC-1 were reduced from 1.16 ± 1.17 to 0.83 ± 0.35 , 1.13 ± 1.07 to 1.13 ± 0.80 respectively. Mean values of plasminogen activator inhibitor type-1 antigen level (PAI-1 Ag) and tissue plasminogen activator antigen level (t-PA Ag) were reduced from 8.59 ± 4.20 to 6.94 ± 3.33 ng/mL, 3.00 ± 0.54 to 2.57 ± 0.90 ng/mL respectively.

Discussion & Conclusion: We conclude that continuous training program lowers the thrombotic risk by improving platelet activation, coagulation and fibrinolytic profiles thus giving the beneficial effect in reduce risk of the cardiovascular disease.

PM-18

A STUDY ON PLATELET RESPONSE TO ASPIRIN BY PLATELET AGGREGOMETRY: CLINICAL AND LABORATORY APPLICATIONS

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Introduction: Aspirin is commonly prescribed as anti-platelet agent, but treatment failure has been described. The term aspirin resistance has been used to describe not only an absence of the expected pharmacologic effects of aspirin on platelets (laboratory resistance) but also poor clinical outcomes (clinical resistance).

Objective: To determine the agreement between the results of platelet rich plasma (PRP) by light transmission aggregometry (LTA), ie the reference method and whole blood (WB) test by impedance method using Chronolog lumi-ionized calcium platelet aggregometer. The laboratory and clinical characteristics of the patients classified as aspirin responder and aspirin resistance groups were also studied.

Patients & Method: A cross sectional study of stable coronary artery disease patients attending Cardiology Clinic at Hospital Universiti Sains Malaysia was conducted in year 2006/2007. Forty patients were analyzed using WB specimen. Among these patients, 9 of them were analyzed simultaneously with PRP (LTA) by same Chronolog platelet analyzer.

Results: We found that both LTA and WB impedance methods using Chronolog platelet aggregometer have a good agreement to categorize aspirin status (kappa=1.000, p value < 0.001). The prevalence of aspirin resistance was 10% based on the findings by WB method. There were no significant differences with regard to age, race, sex, smoking, hyperlipidemia, diabetes mellitus, hypertension and platelet count between aspirin responder (full or partial) and aspirin resistance groups. For laboratory parameters, absent/reduced ATP released with arachidonic acid (AA) and absent/ reduced WB platelet aggregation with ristocetin showed significant different between aspirin resistance and responder group. The saw tooth appearance on WB platelet aggregation tracing seen in patients taking aspirin is not predictive of aspirin response.

Discussion & Conclusion: Whole blood impedance method analyzed by Chronolog platelet aggregometer able to categorize the aspirin status. Findings of this study can be used in future assessment of laboratory evidence of platelet response to aspirin.

PM-19

EFFECT OF WARFARIN ON PROGOAGULANT AND ANTICOAGULANT LEVELS IN STABLE WARFARINIZED PATIENTS

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Introduction: The anticoagulant effect of warfarin is mediated by the inhibition of vitamin K dependent carboxylation of coagulation factors II, VII, IX, X (procoagulants) and protein C and S (anticoagulants). Deficiency of both proteins may lead to thromboembolic disorders. However, detection of this condition while patient on warfarin is difficult by the conventional functional assays.

Objective: To investigate the effects of warfarin to the levels of protein S, protein C, factor II and factor VII among stable cardiac patients not known to have protein C or protein S deficiency. The findings from this study could be used to detect protein C and protein S deficiency for patients on warfarin without needing to stop them from the treatment

Patients & Method: 20 healthy donors not on medication and 60 cardiac patients on warfarin were chosen for this study following their consents. INR were determined on all subjects. The factor assays and protein C and protein S activity assays were run by ACL 9000 coagulation analyzer. All the results were expressed in % of activity.

Result: The reference ranges for normal donors were determined on all the parameters tested. The means, ranges and 95% CI were determined for factor II, VII, protein C and protein S for all the warfarinized subjects. The ratios for protein C/protein S to factor VII and factor II were also determined. INR > than 2 denotes warfarin effect for all patients on this drug. There was a significant negative correlation (r) for INR with factor II, VII and protein C, but not protein S.

Discussion & Conclusion: The effects of warfarin (by INR values) were demonstrated for factor II, VII and protein C levels. The anticoagulant to procoagulant ratios obtained from this study could be used to predict the possible protein C and protein S deficiency in warfarinized patients and will be followed by further investigations for confirmation.

PM-20

INHALER TECHNIQUE OF ASTHMATIC PATIENTS ATTENDING THE HEALTH CLINICS IN THE DISTRICT OF BACHOK

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Objective: To study the inhaler technique of asthmatic patients attending the Health clinics in Bachok district, Kelantan.

Patients & Method: A cross sectional study was done in the 6 health clinics in the district of Bachok. Two hundreds and twenty-five samples were selected randomly amongst the registered asthmatic patients. They were divided into recurrent asthmatic (RA) patients (n=110) and non recurrent asthmatic (NRA) patients (n=115). Data were gathered by using self-answered questionnaire and observation of the inhaler technique.

Result: Seventy seven percent of asthmatic patients used the correct inhaler technique. Out of these, 37% were from the RA group and 40% from the NRA group. We also found 15% of the RA group never attended school compared to 10% of the NRA group.

Discussion & Conclusion: The percentage of asthmatic patients with correct inhaler technique was higher in the NRA group.

PM-21

A CASE OF HYPERBASOPHILIC FORM OF ACUTE PROMYELOCYTIC LEUKAEMIA

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Introduction: Acute promyelocytic leukaemia (APML) is a subtype of acute myeloid leukaemia (AML) with unique morphologic, cytogenetic, molecular and clinical features. Besides the classical hypergranular variant, there is also a cytological microgranular variant with significant clinical implications in both children and adult. Moreover, a basophilic form and a hyperbasophilic microgranular variant have been described.

Case Report: 16 year old boy presented with spontaneous gum bleeding and multiple bruises on the day of admission. Three days prior to the admission he gave history of fall with right elbow injury. He went for traditional massage and noted huge bruises and swelling over that area however no other bleeding tendencies. He was pale with hepatomegaly of 2 cm with no other organomegaly. His blood film and marrow examination suggestive of acute promyelocytic leukaemia with t(15;17) detected.

Discussion & Conclusions: Early diagnosis of t(15;17) acute promyelocytic leukemia (APL) is essential because of the associated disseminated intravascular coagulation and the unique response of the disease to all-trans retinoic acid (ATRA) therapy. Early diagnosis depends primarily on morphological recognition.

PM-22

INFLUENCE OF AGE ON THE SURVIVAL OF ORAL CANCER PATIENTS IN HOSPITAL UNIVERSITI SAINS MALAYSIA

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Objective: The study explored age distribution and the influence on patients' survival in Hospital Universiti Sains Malaysia (HUSM).

Patients & Method: A retrospective record review was conducted in August 2006 in HUSM, involving 133 patients diagnosed as having oral cancer from 1986 to 2005. The required information was retrieved from patients' records and the data was transferred to a specially designed data extraction form. Data on follow-up period was obtained to determine patients' status and their survival time. All data extraction procedure was done by the main researcher. Data entry and analysis was done using SPSS version 12.0. Categorical variables were presented with frequency and percentage. Associated factors were identified by chi-square test while survival probability was determined using Kaplan Meier and log-rank test.

Result: Mean age was 58.5 (SD=16.05), with peak age between 61 to 70 years (27.1%). Seventeen patients (12.8%) were less than 40 years old, 45 patients (33.8%) within 40 to 59 years old and 71 patients (53.4%) were among 60 years old and above. Age was associated with morphology type of oral cancer. Five-year survival rate was significantly higher among patients less than 40 years old (28.6%), followed by 18.0% for patients within 40 to 59 years old and lowest (14.9%) among 60 years old and above ($p=0.032$).

Discussion & Conclusion: Most oral cancers occurred among older age group, which had significantly less survival time.

PM-23

PRESENTATION OF ORAL SQUAMOUS CELL CARCINOMA AMONG PATIENTS IN HOSPITAL UNIVERSITI SAINS MALAYSIA

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Objective: This study explored the presentation of Oral Squamous Cell Carcinoma (OSCC) and their effect on patients' survival in Hospital Universiti Sains Malaysia (HUSM).

Patients & Method: A retrospective record review was conducted in August 2006 in HUSM, involving 133 patients diagnosed as having oral cancer from 1986 to 2005. The required information was retrieved from patients' records and the data was transferred to a specially designed data extraction form. Data on follow-up period was obtained to determine patients' status and their survival time. All data extraction procedure was done by the main researcher. Data entry and analysis was done using SPSS version 12.0. Categorical variables were presented with frequency and percentage. Associated factors were identified by chi-square test while survival probability was determined using Kaplan Meier and log-rank test.

Result: Of 133 patients diagnosed as oral cancer in HUSM, a total of 100 (75.2%) were OSCC type. It occurred mainly in males (64%), on the tongue (42%) and presented with stage IV (78%). There was significant association between OSCC and site of oral cancer ($p < 0.001$), duration of symptoms ($p = 0.027$), betel quid habit ($p = 0.002$) and age ($p = 0.045$). Five-year survival rate was significantly lower for patients with OSCC (12.4%) compared to other types of oral cancer (44.0%: $p < 0.001$).

Discussion & Conclusion: OSCC presented mainly among males, on the tongue and advanced stage as well as low survival. It was associated with oral cavity cancer, early duration of symptoms, betel quid habit and older age.

PM-24

EVALUATION OF TUBERCULOSIS CONTACT INVESTIGATION IN HOSPITAL PASIR MAS AND HOSPITAL BESUT, MALAYSIA IN 2005-2006

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Introduction: Tuberculosis (TB) contact investigations are routinely conducted by hospitals and health departments in Malaysia but the information on the procedures followed and the outcomes is still limited.

Objective: The objective of the study is to review the outcomes of TB contacts investigations performed in two selected district hospitals in the country.

Patients & Method: A descriptive and cross sectional study based on retrospective record review of the index TB cases in 2005 and their respective contacts until 2006 were conducted. Contacts were diagnosed as TB disease based on clinical features, chest x-ray or sputum results while latent TB infections (LTBI) were taken as tuberculin skin test (TST) readings of more than 10 mm for adults 15 years old and above; more than 15 mm for children less than 15 or positive TST converter. Complete screenings were considered for contacts who have been diagnosed as TB disease and LTBI or who have undergone up to four three-monthly screening follow-ups. Data were then analyzed using SPSS software.

Result: One hundred and thirty index TB cases registered in both hospitals in 2005 and their 236 recorded contacts were reviewed. In Hospital Pasir Mas, of 230 identified contacts only 76 (33.0%) came for screening, out of which only 10 (13.2%) have completed the required investigation schedules. Only two (2.6%) and eight (10.5%) of them were diagnosed to have active TB and LTBI respectively. We found no significant factors related to active TB and LTBI and the infectiousness of the index cases or contacts susceptibility. Time period taken for the investigations and factors associated with the completeness of the screenings were also explored.

Discussion & Conclusion: TB contact investigations and its relevant records in our health facilities needs to be improved to ensure that high risk individuals exposed to TB are identified and promptly managed.

PM-25

RISK FACTORS FOR FREQUENT VISITS TO EMERGENCY DEPARTMENT AMONG THE ASTHMATIC CHILDREN PRESENTED TO EMERGENCY DEPARTMENT HOSPITAL UNIVERSITY SAINS MALAYSIA(HUSM) FOR ACUTE ASTHMA

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Objective: To identify the risk factors for frequent visits to Emergency Department for acute asthma and also the risk factors for poorly controlled asthma among asthmatic children presenting to Emergency Department(ED) Hospital USM

Method: This is a cross sectional study. A total of 260 children between 5 to 12 years old who presented to Emergency Department (ED) for acute asthma requiring nebulised β_2 agonist were enrolled in this study. Parents who gave their informed consent were interviewed by the investigator. All information including the demographic data, asthma history, medication history and risk factors for poorly controlled asthma were enquired using standard Performa.

Result: Single emergency department visit was reported in 26.2% of children with 73.9% required at least one revisit to ED for the last one year. About one third of the children who reported good controlled asthma were actually having persistent asthma according to the GINA guideline classification. Frequent use of β_2 agonist bronchodilator (OR=16.76, family history of eczema (OR=2.67), family history of asthma (OR=1.94) and poor compliance to treatment (OR=2.56) were the risk factors for frequent visit to ED.

Conclusion: Our children's asthma symptoms are still not well controlled. Factors for frequent ED visits were identified such as poor compliance to treatment, frequent use of β_2 agonist bronchodilator, family history of asthma and eczema.

PM-26

AUTOMATED IMMATURE GRANULOCYTES COUNTS: A USEFUL PARAMETER FOR PATIENTS ADMITTED TO NICU-HUSM

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Objective: To evaluate the significant of immature granulocytes (IG) obtained from Sysmex XE-2100.

Patients & Method: 30 patients admitted to NICU were analysed from 9 March until 8 April 2008. Blood was acquired from these patients and full blood count was run through XE-2100. The XE-2100 utilizes XE-Immature Granulocytes software, a technology for counting immature granulocytes. This is based on the parameter of light scattering and fluorescence.

Result: A full blood count of 30 patients were evaluated. The mean of total white blood cell (TWBC), neutrophil, and immature granulocytes was $(12.68 \pm 2.96) \times 10^9/l$, $(6.92 \pm 2.75) \times 10^9/l$ and $(0.20 \pm 0.29) \times 10^9/l$ respectively. Of these 30 patients, two of them have IG $> 0.4 \times 10^9/l$ (2%). There is also a significant association between neutrophil count and immature granulocytes. ($p < 0.001$)

Discussion & Conclusion: This new technology that measure immature granulocytes (IG) by XE-2100 appears to be extremely useful in the diagnosis and monitoring patients with underlying infection.

PM-27

SCHOOL ORAL HEALTH DAY” PROGRAMME: OUTCOME ASSESSMENT

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Objective: To assess the outcome of ‘school oral health day’ program conducted in Sekolah Menengah Kebangsaan Kemunin, Kota Bharu after one year.

Subjects & Method: Comparative cross sectional study was carried out among 128 Form I pupils aged 13 who had never attended the ‘school oral health day’ program versus 141 Form II pupils aged 14 who received a three day ‘school oral health day’ program in 2006. This program comprised of an exhibition, lectures, and tooth brushing drill. Outcome of the program was evaluated by testing the knowledge, attitude and practice towards oral health using a 31 item self-administrative questionnaire. The test was conducted in the year 2007. Knowledge score amongst the Form I and Form II students were tested by independent t test.

Result: Overall knowledge score was higher in the Form II group i.e. the intervention group than the Form I- non-intervention group ($p = <0.001$). However, both groups had lack of knowledge that acidity of sour fruits can cause erosion, poor oral hygiene can cause gingivitis and betel quid chewing can cause oral cancer. Form II pupils showed more positive attitude and good practice regarding tooth brushing and using of fluoride toothpaste.

Discussion & Conclusion: The study suggests that ‘school oral health program’ seems to be inadequate in improving the knowledge and school children need reinforcement of oral health education messages.

PM-28

MALNUTRITION AND DIETARY PATTERN OF CHILDREN AGED BELOW 12 YEARS OLD LIVING IN MUKIM KEMUMIN, KOTA BHARU, KELANTAN

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Objective: A study to assess household food insecurity was carried out among 150 (n=150) households in Mukim Kemumin, Kota Bharu, Kelantan. Apart from this study, an assessment of nutritional status and dietary pattern of children of the selected household aged below 12 years old was implemented, where a total of 150 households were selected through proportion sampling.

Subjects & Method: The total number of children who participated in the study consisted of 80 males (n=80) and 70 females (n=70) respectively. The nutritional status of children were assessed using anthropometric measurements; weight for age (W/A), height for age (H/A) and weight for height (W/H). The measurements were interpreted based on the National Center for Health Statistics (NCHS) reference. Height and weight were measured using digital weighing scale (TANITA) and SECA body meter. Beside nutritional status, pattern of food intake of the children were assessed.

Result: The findings showed that 56.3% of the children were underweight, 48.5% were stunted and 28.4% were wasted. The dietary intake pattern revealed that the main sources of calories in their diets consisted of rice, sugar and crackers. The major sources of protein include fish, eggs and poultries. However, the trends of fruits and vegetables consumption among the children studied were very low and considered a worrying trend.

Discussion & Conclusion: Malnutrition is prevalent in the community in Kemumin, Kota Bharu, Kelantan.

PM-29

JOB SATISFACTION AND ITS ASSOCIATED FACTORS AMONG PARAMEDICS WORKING IN HOSPITAL BESUT, TERENGGANU

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Objective: The aims of the study were to assess the proportion of job satisfaction and determine its associated factors among paramedics of U29 Grade in Hospital Besut, Terengganu.

Subjects & Method: A cross-sectional study was conducted to 105 respondents who consented to be interviewed. Our research tool was a guided self-administered questionnaire which consists of 22 aspects of the job.

Result: Out of 105 respondents, 85 (81%) of them were female staff nurses and the remaining were male medical assistants. Mean (SD) for age of the respondents was 38.1 (8.59) years. Among the paramedics, 71 (67.6%) of the respondents had high job satisfaction. There were no significant association between the level of job satisfaction and their socio-demographic characteristics and job factors such as age, gender, department where they work, shift work and duration of working.

Discussion & Conclusions: There is a high job satisfaction among paramedics of U29 Grade in Hospital Besut, Terengganu. However, there are no significant associations between job satisfaction and socio-demographic characteristics and job factors.

PM-30

EPIDEMIOLOGY OF NEEDLESTICK INJURY AMONG HEALTH CARE WORKERS IN KELANTAN FROM 1997 UNTIL JUNE 2005

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Objective: To determine the epidemiology of needlestick injury among health care workers in Kelantan from 1997 until June 2005.

Material & Method: All case reports in the data base of reporting system for occupational accident and dangerous occurrence (WEHU A1-A2) in Kelantan from 1997 to June 2005 were analyzed using Microsoft Excel® by using descriptive statistical analysis.

Result: A total of 291 accident cases were reported among health staffs and needlestick injury contributed to 69.1%. Year by year distribution of needlestick injury is in reducing trend with the highest incidence was in 2001 (35 cases) and the lowest was in year 2000 (9 cases). Almost half of the cases were between 21-30 years, majority was Malay female, nearly one-third occurred in ward. The highest injury was among nursing students (20.3%) followed by staff nurses (14.4%) and medical officer (10.7%). 41.3% of needlestick injury occurred while doing procedure followed by performing diagnostic glucometer (12.4%). Among staff nurses, most were contributed from 41-50 years age group and among medical officers, nearly half of the cases were contributed from 21-30 years.

Discussion & Conclusions: Needlestick injury presented as a major cause of occupational accidents among HCWs in kelantan. Most of the needlestick injury occurred in ward, while doing procedure, among nurses and less experienced workers. However, among the staff nurses the incident seems to be increased with the increasing of age.

PM-31

EPIDEMIOLOGIC CHARACTERISTICS OF PESTICIDES POISONING IN KELANTAN FROM 1997-2005

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Objective: To determine the epidemiologic characteristics of pesticide poisoning in Kelantan from 1997 until June 2005.

Material & Method: All case reports in the data base of reporting system for pesticide poisoning in Kelantan from 1997 to June 2005 were analyzed using Microsoft Excel® by using descriptive statistical analysis.

Result: A total of 114 cases of pesticide poisoning were reported from 1997 to 2005 with the mean of 14 cases yearly. The incidence rate ranged from 0.03 to 0.13 in 10,000 population with the highest IR in 1998 and 2003 (IR=0.13). There is a high incidence of poisoning among children 10 years old and below (18%). The pesticides most often implicated were paraquat (28.9%) and organophosphate (21.1%). The main route of poisoning were oral (68.4%) followed by inhalation (22.8%). Accidental poisoning contributed to almost half of the cases (48.6%) followed by occupational accident in 32.4% of the cases. Only 22.8% of victims were given first aid at the initial stage of poisoning. A small proportion of cases were confirmed by laboratory investigation (6.1%) and a few patients died after admission (2.6%) and discharged at their own risk (4.4%).

Discussion & Conclusions: The incidence of pesticide poisoning in Kelantan was almost comparable in male and female however, the incidence among children quite worrisome. The commonest pesticides involved were paraquat and organophosphate. Oral ingestion is the main route of poisoning and nearly half were due to accidental poisoning. Survival rate was high; only 2.6% of the victims died even though majority did not received first aid at the site of poisoning.

PM-32

***GASTROINTESTINAL STROMAL TUMOUR (GIST): A RARE CAUSE OF
INTESTINAL OBSTRUCTION IN NEONATE***

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Introduction: Gastrointestinal stromal tumour is very rare in newborns. A thorough
literature search yielded less than 5 previous reports.

Case Report: This is a report of a baby born with congenital GIST. The baby was
born at term. Antenatal ultrasound showed features suggestive of duodenal obstruction.
Postnatally the baby was not found to be dysmorphic, but there was abdominal
distension confined to the upper region of the abdomen. Gastric aspirate was non
bilious. Abdominal radiograph showed presence of 'double-bubble' air shadow
suggestive of duodenal obstruction. The child was operated and intraoperative findings
revealed an intraluminal mass in the first and second parts of the duodenum.
Gastrojejunostomy and tumour debulking was performed. The diagnosis of GIST was
made by histopathology and immunohistochemical studies of the tumour specimen.
The tumour was positive for SMA and S 100 markers, but negative for CD117 (c-kit)
and CD34. The tumour markers namely CEA, β HCG and α FP were normal. No
evidence of metastasis was found. Postoperatively it was decided not to give
chemotherapy to the child and at the age of 5 months, the child is asymptomatic and
developing well.

Discussion & Conclusion: This case illustrated a rare cause of duodenal obstruction
in neonates

PM-33

SEA SNAKE BITE COMPLICATED WITH RHABDOMYOLYSIS, ACUTE RENAL FAILURE AND COMPARTMENT SYNDROME: A SUCCESS STORY

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Introduction: Sea snake venoms are more toxic than those of land snakes. However, cases of sea-snake bites with systemic envenomation are rare. Sea snake venoms are myotoxic, leading to generalized rhabdomyolysis. Effective treatment of sea snake poisoning required specific antivenom. Supportive therapy is also crucial in the overall management.

Case Report: We reported a case of a sea-snake bite with systemic envenomation. A 27 year-old Cambodian man was bitten by a sea snake over his right foot while fishing. He developed rhabdomyolysis and associated acute renal failure as the complication from the myotoxins. He also developed respiratory embarrassment due to the neurotoxins. He was given 17 vials of sea snake antivenom. He had vigorous fluid replacement with forced mannitol-alkaline diuresis for ongoing rhabdomyolysis. He also had CVVH therapy followed by haemodialysis. However, later he also developed bilateral upper limb compartment syndrome as a result of on-going rhabdomyolysis and underwent fasciotomy and carpal tunnel release. He had prolonged ventilation complicated with nosocomial chest infection and was extubated after 34 days. He developed critical illness polyneuropathy, however muscle power improved with physiotherapy. His renal function recovered fully and haemodialysis was stopped after 6 weeks. He was discharged well after 77 days of admission.

Discussion & Conclusions: We reported a successful treatment of a rare case of sea snake bite with systemic envenomation. The patient developed acute renal failure and compartment syndrome due to ongoing rhabdomyolysis. 17 vials of sea snake antivenom, fasciotomy and intensive supportive therapy were given.

PM-34

MYXOID LIPOSARCOMA OF THE BREAST: REPORT OF A RARE CASE AND REVIEW OF LITERATURE

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Introduction: Primary sarcomas of the breast are extremely rare comprising less than 1.0% of all malignant tumors of the breast. It is even rare to be reported in a 25-year-old female. Till date very few published reports exist regarding this lesion. Most of the cases have reported sarcoma occurring between fourth to sixth decades. To the best of our knowledge only one case report has been published reporting primary liposarcoma of breast in the third decade. We present this case as the second well documented case report of primary myxoid liposarcoma of female breast at this young age.

Case Report: A 25-year-old woman presented with a well defined firm, mobile lump 4cm in size in the upper outer quadrant of her right breast. Fine needle aspiration cytology was performed and a diagnosis of fibroadenoma was made. It was followed by ultrasonography and again a diagnosis suggestive of fibroadenoma was made. The patient underwent lumpectomy. Per operatively the tumor was soft and well encapsulated. On gross examination the lumpectomy specimen measured 4.5x4x2 cm. It was well encapsulated. Cut surface was yellowish with a myxoid and gelatinous surface. Microscopically the tumor showed a malignant neoplasm composed of a delicate, branching capillary network coursing through the tumor cells imparting a chicken wire appearance. Atypical lipoblasts, multinucleated giant cells and multivacuolated lipoblasts were also seen. Background showed myxoid changes with mucoid pools. Based on these findings, a histopathological diagnosis of myxoid liposarcoma was made. The patient was discharged and the postoperative period was uneventful.

Discussion & Conclusions: Myxoid liposarcoma in this age group is a rare entity. The case is reported here to highlight the fact that, even though rare in young females but the possibility of a breast lump being a myxoid liposarcoma does exist.

PM-35

GASTRIC ANTRAL VASCULAR ECTASIA IN A 62 YEAR-OLD LADY WITH CHRONIC MYELOID LEUKAEMIA

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Introduction: Gastric antral vascular ectasia (GAVE) was first described in 1953. Also known as ‘watermelon stomach’, this uncommon cause of gastrointestinal blood loss is characterised by red patches or spots either in a linear fashion or diffusely spread in the gastric antrum. Classically, GAVE patients are middle-aged females with concomitant autoimmune disease. GAVE has also been associated with liver cirrhosis, haematopoietic stem cell transplantation, end-stage renal disease, diabetes melitus and hypothyroidism.

Case Report: We report a 62 year-old Malay lady currently on treatment for chronic myeloid leukaemia with imatinib mesylate (Glivec®). She has past history of Type 2 diabetes mellitus, hypertension and breast carcinoma. She presented with the complaint of having poor effort tolerance and excessive fatigue. There were also episodes of passing out blackish stools. She was pale on admission with a haemoglobin level of 6.7g/dL. Per rectal examination did not reveal any melaena, but stool occult blood was positive. Subsequent oesophago-gastro-duodenoscopy (OGDS) revealed a characteristic ‘watermelon stomach’ pattern. She was initially started on a high dose proton-pump inhibitor infusion which a week later was converted to high dose oral maintenance therapy. Repeat OGDS two months later showed resolution of the linear gastric antrum lesions.

Discussion & Conclusions: GAVE, a rare cause of gastrointestinal blood loss, is being increasingly recognised as a cause of persistent acute or occult gastrointestinal bleeding especially in elderly women. An increased awareness of GAVE will hopefully facilitate the early identification and treatment of this disease entity.

PM-36

BIOCHEMICAL ANALYSIS AND APOLIPOPROTEIN E IN HEMORRHAGIC STROKE

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Introduction: Apolipoprotein E (Apo E), and its respective isoforms, has been linked to outcome and survival following acute central nervous system injury. Apolipoprotein E is a polymorphic glycoprotein produced in different cells that plays a role in cholesterol transport and the mechanisms of lipoprotein metabolism.

Objective: To investigate the possible association between Apo E gene, metabolic regulation of cholesterol and outcome of patient after suffering hemorrhagic stroke.

Patients & Methods: A prospective cohort study was conducted on all patients with hemorrhagic stroke admitted to the Hospital Universiti Sains Malaysia during a 1-year period. All patients were managed according to standard protocol, and treatments were given according to their clinical grading. The study end points were survival time and functional outcome at 6 months based on a dichotomized Glasgow Outcome Scale (GOS).

Results: Thirty-six patients were recruited. 27 (75%) patients had Glasgow Coma Scale (GCS) between 5 to 8 on admission and 9 (25%) were admitted with GCS of 9. At 6 months, 86% had a poor or unfavorable outcome (GOS I-III) and 14% had good or favorable outcome (GOS IV-V). The mortality rate at 6 months were 55%. The univariate analysis for survival function revealed the midline shift ($p=0.0064$) and pupillary status on admission ($p=0.0016$) were significant predictors. Multivariate analysis identified midline shift as the single predictor of functional outcome ($p=0.013$), and the papillary status was sole significant predictor of survival function ($p=0.016$). Apolipoprotein E epsilon 4 was not found in all of the samples.

Discussion & Conclusion: In our study high levels of TC, LDL-C, c-reactive protein and homocystein which are accepted risk factors for hemorrhagic stroke, were more frequently seen in patients compared to healthy control. Gene-gene and polymorphism-polymorphism interactions must be explored to understand the underlying functional basis for the relationships discovered. Studies of multiple genes are needed, rather than the single gene studies currently available.

PM-37

EFFECT OF ASIATIC ACID ON ACETYLCHOLINESTERASE INHIBITOR ACTIVITY – PRELIMINARY STUDY

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Objective: The screening of asiatic acid extract effect on acetylcholinesterase inhibitor.

Material & Method: *C. asiatica* was purchased and the extract was prepared according to the methanol extraction method, previously described by Jayashree *et. al* 2003 with certain modifications. Thin Layer Chromatography (TLC) bioautographic method was performed for screening the effect of asiatic acid from hexane partitioning extract on Ache inhibitory activity after sprayed with Ache and compared with synthetic standard asiatic acid previously described by Marston *et al*, 2001.

Result: Asiatic acid successfully inhibited the Ache activity from *C. asiatica* extracts and reference compound asiatic acid.

Discussion & Conclusion: We successfully screened asiatic acid respond on Ache inhibitor activity on thin layer chromatography (TLC) plate. With this finding, asiatic acid and its derivatives showed promising results in obtaining good initial step for the discovery of new Ache inhibitory which may be used to overcome the Alzheimer's disease.

PM-38

HOSPITAL UNIVERSITY SCIENCE MALAYSIA EXPERIENCE ON PARICALCITOL IN END STAGE RENAL FAILURE

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Introduction: Secondary hyperparathyroidism and bone disease occurs commonly in End Stage Renal Failure patients.

Objective: To identify the efficacy of intravenous paricalcitol in reducing serum iPTH levels and its effects on calcium and phosphate products.

Patients & Method: 5 patients on regular hemodialysis at Hospital University Science Malaysia with initial serum iPTH between 82.5pmol/L to 369.2pmol/L were started with intravenous paricalcitol at end of hemodialysis. Patients were observed for 6 months. Serum iPTH, calcium and phosphate were taken at first, third and sixth month. Initial paricalcitol dose was calculated at 0.04mcg/kg x body weight while the maintenance dose was calculated at iPTH (pmol/L)/12.

Results: iPTH reduction ranged from 41.7% to 93.6% in six months. No adverse effects were observed. Initial calcium and phosphate products was 2.96 to 6.53, while later it was between 3.39 to 5.85.

Discussion & Conclusion: Paricalcitol was effective and safe in reducing serum iPTH levels without significant impact to calcium and phosphate homeostasis.

PM-39

DEPRESSION AND ITS EFFECTS ON HEMODIALYSIS PATIENTS IN KELANTAN, MALAYSIA

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Introduction: Depression commonly encountered in end stage renal disease (ESRD). Kimmel *et al* reported depression rate being 50% in ESRD patients.

Objective: To identify our local depression rates in ESRD.

Subjects & Method: A cross sectional study, conducted on ESRD patients in Hospital University Science Malaysia (HUSM) and a private dialysis centre. Subjects were interviewed using validated Malay version of Hospital Anxiety and Depression Scale (HADS) questionnaire. Investigations like haemoglobin, iron, renal function, albumin, interdialytic weight gain and blood pressure were obtained and analyzed.

Result: Prevalence of depression (using 11 as the cutoff point) was 56.8%. On univariate analysis, these patients have higher systolic blood pressure (149.0 Vs 138.6; $p < 0.031$) and lower haemoglobin (10.4 Vs 11.5; $p < 0.009$) and more female in the depressed group (32.1 % vs 24.7%; $p < 0.027$). In multivariate analysis, haemoglobin and systolic blood pressure control was significant with $p < 0.023$ and $p < 0.008$ respectively. Diabetics had more depressions with $p < 0.033$.

Discussion & Conclusion: Our prevalence of depressive illness in ESRD was comparable to previous studies. Depression is significantly associated with lower hemoglobin level and higher systolic blood pressure.

PM-40

**STAPHYLOCOCCUS AUREUS CONTAMINATION ON NURSES' UNIFORMS
IN HUSM MEDICAL WARD**

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Objective: The aim of the study was to determine the degree of total *Staphylococcus aureus* counts on nurses' uniforms at the start and the end of duty. *S. aureus* especially the antibiotic resistant species could contribute to the prevalence of Hospital- Acquired Infections (HAI's).

Material & Method: Wet swabbing method was used to collect bacteria colonies on nurses' uniforms at the start and the end of duty. Sterilized moistened cotton buds were used to swab various critical areas on the uniforms such as dominant hand's sleeve, pocket and abdominal areas. The cotton buds were placed in liquid media and later transferred into 3M Rapid *S. aureus* count. The petrifilms were incubated at 30-35°C for 24 hours. The colonies were counted and results were stated as colony forming units (CFU's).

Result: It was found that there was a significant difference of *S. aureus* contamination on nurses' uniforms at the start and end of duty ($p=0.048$). All critical areas on the uniforms were found to be heavily contaminated with *S. aureus* even before the duty started. However, there was no significant difference of degree of *S. aureus* contamination present on various critical areas on the uniforms at the start ($p=0.158$) and end of duty ($p=0.560$).

Discussion & Conclusions: The data showed that nurses' uniforms were heavily contaminated with *S. aureus* before duty. Uniform cleaning policy should be introduced to healthcare professionals in order to reduce bacteria contamination and HAIs in general.

PM-41

LIPID PROFILES AND PREVALENCE OF ASSOCIATED CARDIOVASCULAR RISK FACTORS AMONG DYSLIPIDEMIC PATIENTS IN HUSM: A RETROSPECTIVE STUDY

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Objective: The aim of the present study is to analyze the lipid parameters among dyslipidemic patients who have been admitted to HUSM and to identify the prevalence of associated cardiovascular risk factors.

Patients & Methods: A retrospective design was adopted and 144 patients (57 males and 87 females) records with dyslipidemia who had been admitted to HUSM at 2007 were collected. Information about age, gender, smoking status, values of the lipid profiles, presence or absence of associated cardiovascular risk factors and antihyperlipidemic treatment were obtained. Lipid profiles were classified according to the NCEP ATP III guidelines.

Results: Age range was 35 to 89 years (58.9 ± 9.9) years. Mean \pm SD for TC, TG, LDL-C HDL-C, were 6.16 ± 1.12 mmol/l, 3.8 ± 0.8 mmol/l, 3.9 ± 4.8 mmol/l and 1.7 ± 1.0 mmol/l respectively. Of the dyslipidemic patients 43% had high TC, 13% high TG, 18.7% very high LDL -C and 13.8% low HDL-C. The older the patient the higher TC ($P=0.04$), the lower HDL-C ($P=0.05$), Females had a higher HDL than males ($P<0.05$). Our results showed that 72.9 % had hypertension, 22.2 % diabetes, 22.2 % ischemic heart disease, 4.2% stroke, 8.3% renal impairment, 76% were smokers.

Discussion & Conclusion: Large proportion of our dyslipidemic patients had high TC. Female comprise the larger proportion of our dyslipidemic patients. The mean TC increases with age as oppose to HDL-C level. Majority of the patients were smoker and hypertensive.

PM-42

SELF-ESTEEM LEVEL AMONG CHEMOTHERAPY PATIENTS AT ONCOLOGY CLINIC OF HOSPITAL UNIVERSITY SAINS MALAYSIA

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Objective: To determine self-esteem level among chemotherapy patients and the relationship between self-esteem level and demography factors as well as side effects of chemotherapy.

Patients & Method: A cross-sectional study was conducted among 44 patients who received chemotherapy in Oncology Clinic of Hospital University Sains Malaysia (HUSM). Data was collected using a questionnaire which consists of section A; demography data and chemotherapy information, and section B; modified Rosenberg Self-Esteem Scale (RSES) with a 5-point Likert scale with score 1 for not agree and 5 very agree. Self-esteem levels were categorized to low (20-29), medium (30-39) and high (40-50). Data was analysed using SPSS version 12 including independent t-test and chi-square.

Result: The study has revealed three most common side effects of chemotherapy were fatigue (100%), loss of appetite (90.9%) and alopecia (75%). Majority of chemotherapy patients (65.9%) have medium score for self-esteem level. There was a significant relationships between self-esteem and age ($p=0.006$), marital status ($p=0.044$) and educational level ($p=0.026$) but not for gender ($p=0.228$). However, there were no significant relationships found between self-esteem and the three most common side effects mentioned by the patients.

Discussion & Conclusions: The self-esteem level of chemotherapy patients in the study was moderate. However, the level was not related to the common side-effects of chemotherapy. It is recommended that measures to increase the patients' level of self-esteem should be emphasised so that the overall patients' well-being would be improved.