1. *Mal. J. Med. Scien. January 1996;3(1):5-7*

Public R & D in Malaysia - Current status

Mafauzy Mohamed

No abstract.

2. *Mal. J. Med. Scien. January 1996;3(1):8-11*

A bacteriological study of acute conjunctivitis

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A retrospective bacteriological study of 527 cases of acute conjunctivitis was done at Hospital Universiti Sains Malaysia over a period of two and half years. Of them, 218 were ophthalmia neonatorum and 309 were acute conjunctivitis cases. The age of patients ranged from newborn to 80 years. Pathogenic bacteria were isolated in 76.6% of ophthalmia neonatorum and in 44.5% of acute conjunctivitis patients. *Staphylococcus aureus* was the predominant bacterial isolate followed by *Staphylococcus epidermidis* in both diseases. The in-vitro antibiotic sensitivity results justify the conventional usage of chloramphenicol and gentamicin in the treatment of acute conjunctivitis.

3. *Mal. J. Med. Scien. January 1996;3(1):12-14*

Retinopathy in non-insulin dependent diabetes mellitus (NIDDM) patients – A preliminary repoort.

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Eighty eight non-insulin dependent diabetes mellitus (NIDDM) patients were examined for retinal changes. The overall prevalence of retinopathy was 43.2% with background retinopathy 20.5%, preproliferative 4.5%, proliferative 6.8% and maculopathy 11.4%. there was a significant correlation between prevalence of retinopathy and duration of diabetes, but not with glycaemic control.

4. Mal. J. Med. Scien. January 1996;3(1):15-17

Fine needle aspiration cytology (FNAC) on thyroid diseases; HUSM experience on 477 cases with histological correlation of 148 of them

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A total of 477 patients with thyroid diseases were examined by FNAC over a period of 3 years. Out of this 71.5% of the aspirates were cytopathologically classified as benign lesions, 2.5% as inflammatory (thyroiditis), 10.5% as follicular lesions and 10.5% were malignant. 4.8% of the aspiration were unsatisfactory. 148 of these cases underwent surgical removal. The accuracy of the cytologic diagnoses were compared with histopathological examination of the operated surgical specimens to determine the accuracy, sensitivity and specificity of the cytopathological diagnosis. A sensitivity of 80.0%, a specificity of 99.03% and an accuracy of 95.9% were noted. This strongly supports that FNAC is an important preoperative diagnostic tool for all thyroid diseases.

5. *Mal. J. Med. Scien. January 1996;3(1):* 18-23

Postoperative pain management knowledge and attitudes among medical personnel in HUSM

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The incidence and severity of postoperative pain continue to be a major concern despite the availability of a wide range of analgesics and methods of analgesia. The objective of this study was to evaluate the knowledge and attitudes of medical personnel regarding postoperative pain management. Questionnaires were given to medical personnel, the results of which indicate that there were obvious deficiencies and misconceptions in the understanding of postoperative pain which translated into poor pain management practices. Clearly there is a need for increased professional awareness of acute pain management practices in HUSM, in order to improve patient comfort and outcome.

6. *Mal. J. Med. Scien. January 1996;3(1):24-29*

Treatment compliance in relapse schizophrenia.

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Non-compliance with treatment is a major problem, especially in psychiatric patients receiving a long-term medication. The aim of this study was to find causes of poor treatment compliance of Schizophrenic patients and how to overcome the problem. Compliance with drug regimen and follow up visits of 116 known cases of scizophrenia was assessed. About 27% of the patients met the criteria of good compliance. Defaulting follow up and taking inadequate dose of medication were common problem among poor compliance group. Although the compliance was not related to any of socio-demographic variable, it was found to be significantly related to the patients' view of usefulness of the medication, treatment duration of less than 5 years, dosage schedule of once or twice per day and the supervision of medication by the relatives. The importance of family support to ensure good compliance in schizophrenic patients was highlighted.

7. *Mal. J. Med. Scien. January 1996;3(1):30-34*

Radiation protection considerations in outpatient treatment using 131-I radioiodine.

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Thyrotoxic patients treated with radioiodine 131-I on outpatient basis create radiation hazard to the public especially their family members. These patients need to be restricted for certain number of days before they can resume their normal activities to ensure others will not be exposed to radiation. In this study the period of restrictions were determined based on the 24hr uptake and effective half-life of 131-I in the thyroid gland. The amount of radioiodine retained in the thyroid gland was measured over the period of 1-20 days after therapeutic administration of the radionuclide using scintillation uptake probe. The mean activity in the gland at day 1 was 74.7%, SD 8.5% of the administered activity and thereafter retention followed a single exponential effective half-life of 5.8 days, SE 0.5 day. From these results the restriction periods for administered activities of 200-1000 MBq were estimated. Information could be used to advise patients before they leave the hospital since no local guidelines are available at the moment.

8. Mal. J. Med. Scien. January 1996;3(1):35-40

Quantitative analysis of normal kidney function using radioisotope technique

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Kidney function study for 24 normal volunteers (13 males and 11 females; age 25-66 years) using radioisotope imaging (Gamma Camera Based Method) were undertaken. Normal range for GFR was estimated based on [TC-99m] DTPA uptake within the kidneys at 2-3 minutes interval after the arrival of the intravenously injected radiopharmaceutical. Normal value of GFR was 102.1 ml/min, SD 13.8ml/min with the range of 77.4-133.0 ml/min. When normalised to body surface area NGFR was 111.9 ml/min, SD 19.7 ml/min with the range 78.4-142 ml/min. The left kidney uptake was 4.1-6.6% giving the average value of 5.6%, SD 0.7%. The right kidney uptake was found to be 3.6-7.6% with the average value of 5.5%, SD 0.9%. The total uptake was found to be 11.1% SD 1.4%. The relative uptake function for the left kidney was 50.4% SD 1.6% and for the right kidney was 49.5% SD 1.7%. The time for the maximum activity in the kidney was 4.3 min SD 1.3 min. for the left kidney and was 4.4 min SD 1.3 min for the right kidney. No blood or urine sample was required and each study took about 20 min. This method permits rapid and easy analysis of renal function and is ideal for routine work. The data will form as a baseline to help clinicians with their routine services in our hospital.

9. Mal. J. Med. Scien. January 1996;3(1):41-43

Multiple polypoid endometriosis: a rare complication following withdrawal of gonadotrophin releasing hormone (GnRH) agonist for severe endometriosis: A case report.

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A 30-year-old female who initially had typical endometriosis treated according to the standard regimen later developed numerous highly vascular endometrial polypi on the vagina, cervix, ureter, serosal surfaces of the uterus, pouch of Douglas (POD) and other areas of pelvic peritoneum as well as the endometrium 8 months after withdrawal of the hormone treatment. We postulate that these polypi developed as a rebound phenomenon upon withdrawal of Zoladex, a gonadotropin releasing hormone (GnRH) agonist used for the disease. We believe this is the first report of rare complication following use of GnRH analogue.

10. Mal. J. Med. Scien. January 1996;3(1):44-45

Paediatric myelodysplastic syndrome: A case report.

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A 11 year old boy presented with a 2 month history of fever, lethargy and bruising. Pallor petechiae and ecchymoses were found on examination. The blood count showed pancytopenia and bone marrow examination was consistent with myelodysplastic syndrome, refractory anaemia subtype under the FAB classification. He required regular blood product support over the next 15 months but he eventually died of intracerebral haemorrhage without evidence of progression to frank leukaemia. Current knowledge of the paediatric myelodysplastic syndromes is briefly reviewed.

11. Mal. J. Med. Scien. January 1996;3(1):46-48

Fulminant tumour lysis syndrome: A case report.

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A 14 years old Malay boy with fatal tumour lysis syndrome (TLS) is described. He was admitted with a two weeks history of a bleeding tendency and high grade fever. He was found to have lymphadenopathy and hepatosplenomegaly, and investigations confirmed him to have T-cell acute lymphoblastic leukaemia with a mediastinal mass and a high presenting white cell count ($158x10^9$/I). Eight hours after he was given the first doses of intravenous chemotherapy, he developed features of severe TLS, i.e. marked hyperkalaemia, hyperphosphataemia, hypocalcaemia, metabolic acidosis and renal impairment with pulmonary oedema. He died two hours later. Risk factors for the development of TLS, and ways of preventing and treating it are discussed.

12. Mal. J. Med. Scien. January 1996;3(1):49-50

General Paresis of Insane: A diagnostic dilemma

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Two atypical cases of General Paresis of Insane (G.P.I) with diagnostic difficulty is reported. They presented mainly as behavioural problems prior to the development of any physical sign. The physical signs were also few and not diagnostic per se of G.P.I. The diagnostic problem was further compounded by the lack of consent for lumber puncture which is common in this part of the country due to the prevailing cultural belief system. The diagnostic and therapeutic implications are discussed.

13. Mal. J. Med. Scien. January 1996;3(1):51-52

Neuropsychiatric S.L.E

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The neuropsychiatric manifestation of SLE is described in a 32 year old female with a rare presentation of a mosaic of diversifying symptoms initially posing a serious diagnostic dilemma but later evolving into an organic brain syndrome. The implications and management are discussed.

14. Mal. J. Med. Scien. January 1996;3(1):53-57

Evaluation of the effectiveness of teaching pathophysiology in the phase II of a Problem Learning Curriculum

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The school of Medical Sciences of Universiti Sains Malaysia, Malaysia is following a Problem Based Learning (PBL) Curriculum. In Phase II [comprising of year 2 and year 3] the PBL is c entered around twelve organ system blocks. Each organ system block runs for five weeks and in each week a clinical problem acts as a trigger for teaching and learning, which through the week is mainly achieved by small group discussion, fixed learning modules, self study and lectures. One organ system block which consistently showed poor results (in terms of higher failure rate and poor grades), was nervous system (NS) block. A critical appraisal of the objectives and course content highlighted that our students, through self directed learning were unable to grasp the nuances of the functioning of the nervous system in health and disease. Thus in an endeavour to facilitate and guide students learning, six broad based lectures covering pathophysiology were delivered at appropriate time slots. The performance of the students in the end-of-block examination (in two consecutive years) was compared with the performance of the students before the introduction of pathophysiology lectures. The data revealed a marked over all improvement in the students grades and a drop in failure rate (from more than 20% to less than 8%) of students who attended pathophysiology lectures. A comparison of the students performance in NS with endocrine and gastro-intestinal (GIT) blocks (which ran concurrently) revealed a better performance in NS than GIT and similar performance as that of endocrine block. Thus, it is concluded that our medical students need assistance in the comprehension of successive links of chain of events which depict how normal function would present as physiological dysfunction in disease state. This is especially so in system blocks which require a proper understanding of their homeostatic regulatory function.

15. Mal. J. Med. Scien. January 1996;3(1):58-61

Career preferences of medical students of Universiti Sains Malaysia

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A total of 241 medical students from Universiti Sains Malaysia responded to a questionnaire on their career preferences and factors influencing their choice of specialty. Internal medicine (24.5%), obstetrics and gynaecology (19.7%), paediatrics (17.2%) and surgery (14.3%) were the most popular choices. General practice (4.6%), community medicine (4.2%) and medical administration (1.3%) were relatively unattractive. Service specialities such as anaesthesia (3.4%) and radiology (1.7%) were less attractive. Pathology (0.8%) was the least popular choice. In the choice of a career, direct contact with patients (36.5%) was the most important factor when compared to fixed hours of work (35.5%) social prestige (35.5%) and financial rewards (34.1%). Research prospects (6%) and teaching opportunity (5%) were relatively unimportant considerations. The students preferred employment in the government general hospital (29.3%) when compared to teaching in the clinical departments of medical schools (23.1%), private hospitals (15.1%) and private general practice (11.0%). Pre and para clinical departments of medical school attracted only 6.4% of students. A total of 51.6% of the students would like to practise in Kuala Lumpur or a state capital, while only 14.0% chose to seek employment in the district. Another 15.8% of the students would not mind working anywhere in Malaysia.

16. Mal. J. Med. Scien. January 1996;3(1):62-65

The biochemistry of falciparum malaria

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No abstract.

17. Mal. J. Med. Scien. January 1996;3(1):66-75

Eclampsia - An overview

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Eclampsia poses a major obstetric problem worldwide and has continued to be the leading case of both maternal and perinatal mortality and morbidity in developed as well as developing countries. The pathogenesis is still unsettled, thus management is controversial in the choice of the most appropriate anticonvulsant and antihypertensive. This review article might high light the better knowledge of pathophysiology and treatment modalities of eclampsia, so as to lower the mortality of both mother and fetus.