

1. *Mal. J. Med. Scien. January 1998;5(1):1-3*

Multimedia technology and the medical profession

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No abstract.

2. *Mal. J. Med. Scien. January 1998;5(1):4-10*

The kidneys, salt and hypertension

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Although sodium has been implicated in the pathogenesis of hypertension, it has not been settled whether the adverse pressor responses to high salt intake are limited to certain conditions like reduced renal mass or whether some forms of hypertension are truly "essential". In view of the widespread practice of advising salt restriction in patient with raised blood pressure, identification of the "salt-sensitive" individuals (if they do exist) may influence the management of these patients. From the preventive aspect also, it may be worthwhile read dressing the issue of how much salt restriction should be advised to the population at large.

Principles of treatment of epilepsy.

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Epilepsy is a common chronic neurological condition with a prevalence of 4-8 per thousand (Hauser, 1990). The present classification of epilepsy is based on two pillars: the aetiology, which distinguishes symptomatic epilepsies from those that are idiopathic and cryptogenic, and the localisation of the disorder in the brain, separating the generalised seizures from epilepsies with partial or focal onset. The majority of the patients with epilepsy will go into remission, and two-thirds will remain so, two years after drug withdrawal.

The impact of epilepsy on individual patients varies. Employment, driving and learning may constitute major problems. There is a small, but definite increase in mortality in patients suffering from epilepsy.

Treatment of epilepsy usually involves long term medical treatment, and the ultimate aim will be no seizures and no drugs. Before starting treatment, the diagnosis of epilepsy should be secure. Initiation of antiepileptic drug therapy needs a full and adequate discussion with the patient, and the choice of the minimum effective dose of an appropriate monotherapy. Non-pharmacological treatments may demand consideration at a relatively early stage, if pharmacological treatment is ineffective.

In choosing between different drugs, judgements about the efficacy of the drug for an individual patient and its tolerability, contribute to the overall effectiveness of an antiepileptic drug. There is good evidence from many studies that the chief factor determining relative effectiveness is likely to be the spectrum and incidence of adverse effects of antiepileptic drugs.

Some 20% of patients developing epilepsy have a chronic disorder, uncontrolled by drugs. In patients receiving, and complying with, optimal doses of a single antiepileptic drug, the addition of further agents is likely to result in a significant improvement in seizure control in only approximately 10% of patients, but inevitably it increases the risks of dose-related, idiosyncratic, and chronic toxicity due to both pharmacokinetic and pharmacodynamic drug interactions. For this group of patients an appropriate aim may not be complete remission of seizures but a compromise of reduced seizure frequency with less severe seizures, to be achieved with one, or at most two, drugs. The management of these patients with unremitting seizures constitute a treatment challenge for epileptologists.

4. *Mal. J. Med. Scien. January 1998;5(1):18-22*

Choice of specialty and training institutions among doctors in Malaysia

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The choice of specialty and training institutions among Malaysian doctors applying for postgraduate training at one of the local universities in 1995 and 1996 was obtained. A postal survey was done on a random sample of these doctors on factors affecting the choice of specialty and the choice of training institutions. Surgery, obstetrics and gynaecology and family medicine were the three most popular specialties with pathology, psychiatry and otorhinolaryngology being the most unpopular. Interest/enjoyment in the specialty, the clinical nature of the specialty and working experience in the specialty were the most important reasons for their choice. The ability to do community work was the most unimportant reason. The male doctors ranked "interest in the specialty" and "the clinical nature of the specialty" significantly higher while the female doctors ranked "marriage and family considerations" higher. Important factors in choosing the training institutions were the "availability of facilities and teachers" and the "location in a central place or nearer to home". The perception of ease of passing the examinations were least important. Consideration of these responses are important for institutions to attract potential candidates.

5. *Mal. J. Med. Scien. January 1998;5(1):23-25*

Analysis of BCL 1 Polymorphism in the human factor VIII gene

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The study involved fragment analysis of intron 18 of the factor VIII gene which contained the restriction site for Bcl 1 enzyme in two haemophilia A families. The fragment was amplified using polymerase chain reaction (PCR) technique. Digestion with the appropriate enzyme revealed that in family A, only a 99bp fragment was obtained and therefore is not informative for carrier detection. However, family B showed presence of a 142bp and 99bp fragments in the mother. This 142bp fragment is inherited by her haemophilic son and this fragment is also found in her daughter suggesting that she is a carrier of the affected X, responsible for the haemophilia A. These contrasting findings in the two families illustrate the usefulness of this polymorphic marker in detection of carriers in the female sibling of the families studied.

6. *Mal. J. Med. Scien. January 1998;5(1):26-30*

Smoking among factory workers in Kota Bharu, Kelantan.

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A survey of 192 factory workers in Kota Bharu Kelantan was carried out to determine the prevalence of smoking and factors associated with it, using a self administered questionnaire. The prevalence of smoking were 58.1 % for male workers and 3.1% for female workers. The majority of smokers started their habits while in primary school. 32.5% of the smokers were classified as heavy smokers and 67.5% as regular smokers. The main reasons cited for smoking were 'smoking helps to release tension' and 'smoking helps them face their problems'. Although a bigger number of the smokers (37.5%) smokes mainly at home, 25.0% mainly smokes at the workplace. This is quite alarming in terms of risks of smoking at the workplace and the issue of workplace environmental tobacco smoke (ETS). Measures to control smoking in the workplace should be component of workplace health practice and be strictly enforced.

7. *Mal. J. Med. Scien. January 1998;5(1):31-38*

The incidence of central nervous system (CNS) lesions in Malaysia: A histopathological study of 1064 cases from the year 1991 till 1994

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A study on the incidence of the CNS lesions over a period of 4 years was conducted in two major hospitals in Malaysia. One is a University Hospital (HUSM) located at the north-eastern part of west Malaysia (referral centre for northeastern region), while the other is Neurology Institute (NI) a general hospital located at the central region and is a national neurological referral centre.

During the period, a total of 1064 (histologically verified) consecutive lesions were seen involving the brain and the spinal cord. Of these, 872 (82.0%) cases were neoplasms of which 293 (33.6%) were malignant. 108 (10.2%) cases were inflammatory, 69 (6.5%) were congenital and the rest was of miscellaneous in nature. In descending order, out of 872 neoplastic cases tumours of the neuroglial origin were 203 (23.3%), of meningotheial origin 193 (22.1%), nerves and nerve sheaths origin 90 (10.3%), vascular origin 70 (8.0%), primitive and undifferentiated cells 68 (7.8%), pituitary adenomas 66 (7.9%), metastatic tumours 57 (6.5%), malformative tumours 54 (6.2%), germ cell tumours 12 (1.4%), non Hodgkin lymphomas 11 (1.3%) and neuronal tumours were 5 (0.6%). The miscellaneous tumours were 43 (4.9%) cases.

Of the 108 inflammatory lesion, 55 (50.9%) were due to pyogenic abscesses, 16 (14.8%) were due to Tuberculosis, 10 (9.3%) due to cryptococcosis while the microorganisms were not detected or identified in the rest of the inflammatory lesions. Of the 64 congenital lesions, meningoencephaloceles formed the majority, 85.9% (55 cases).

Malaysian comprise of three major ethnic groups, the Malays, the Indians and the Chinese. Of interest to note that in all the five main primary brain tumours; meningiomas, astrocytomas, schwannomas, pituitary adenomas and medulloblastomas, the incidence among the ethnic Malays in the highest, 54.7% (293/536), followed by the Chinese, 27.6% (148/532) and last among the Indians, 11.7%. The incidence of all CNS lesions per 100,000 population was 1.5, while the incidence of malignant neoplasms of CNS was 0.5. These figures are compared with the incidence of CNS lesions in other countries.

8. *Mal. J. Med. Scien. January 1998;5(1):39-41*

The efficacy and safety of cyclic antidepressants

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Cyclic antidepressants are widely used as the first line antidepressants in developing country. Ninety six depressed out-patients with minimum baseline Hamilton Depressive Rating Scale (HDS) score of 11 entered an open clinical trial. The maximum daily dose allowed was equivalent to 150 mg of imipramine. The highest effective dose was continued for 6 weeks. Most (96%) of the patients tolerated cyclic antidepressants and only 4 required new generation of antidepressants. Eighty six (94%) patients responded to the treatment regime while the other 6 required higher doses of antidepressants. About 69% of the patients improved with the equivalent daily dose of 75 to 100 mg of imipramine. It is concluded that majority of the depressed out-patients tolerated and required a moderate dose of tricyclic antidepressants. It seems that the routine first line treatment with newer antidepressants at current price is not cost-effective.

9. *Mal. J. Med. Scien. January 1998;5(1):42-44*

Identification of Hb Constant Spring: Using a PCR based technique.

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Since Hb Constant Spring is the major cause of Hb H disease in SEA, accurate detection of high risk couples carrying the Hb Constant Spring genes will help genetic counseling and prenatal diagnosis. Hb CS-Hb H disease is associated with a more severe clinical state than Hb-H-deletional Hb H disease. We utilised a non radioactive method based on polymerase Chain Reaction to detect the Hb Constant Spring allele in normal and Hb H Constant Spring samples. The procedure involved 2 pairs of primer, namely A7 + A1B and $\partial G2 + \partial G4$ to amplify the 314 and 191bp fragments from the normal and the Hb Constant Spring determinants respectively. Amplification was successfully done giving the 191bp fragment from the Hb Constant Spring allele and 314bp fragment from normal sample. We conclude that this procedure can be easily established as a screening test in the laboratory for detection of Hb Constant Spring genes.

10. *Mal. J. Med. Scien. January 1998;5(1):45-46*

Innervation of Dentine

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Dentine is a specialised mineralised tissue which often becomes exposed by disease or restorative procedure. Once exposed dentine can be very sensitive. Although the present of nerves in dentine is implicated as one of the hypotheses to this clinical feature, its present and extent into dentine is still controversial. This is a review on the present knowledge of the nerve terminal (intratubular axon) in dentine.

11. *Mal. J. Med. Scien. January 1998;5(1):47-50*

Hypopituitarism following surgical resection and cranial radiotherapy for craniopharyngioma. A case report.

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A 33- year old Malay lady was admitted in August 1988 with a 5-year history of headache and hypopigmentation. She had primary amenorrhoea. Six months prior to admission she developed left hemiparesis and blurring of vision. On examination, hirsutism and underdevelopment of secondary sexual characteristics were noted. Eye examination showed bitemporal hemianopia and bilateral optic atrophy. CT- scan showed suprasellar calcification with enlarged sella turcica, compression of the third ventricle. A diagnosis of craniopharyngioma with hydrocephalus was made but she refused surgery and defaulted follow-up. In September 1991, she was again admitted with worsening of vision though her left hemiparesis had resolved completely. Craniotomy was performed. The optic chiasma was found to be prefixed and stretched but no visible tumour tissue was seen. Cystic craniopharyngioma was identified protruding through the dilated right foramen of Monro and was removed. Postoperative course was uneventful following that, she underwent 25 courses of radiotherapy. Her visual defects, however, did not improved. Subsequent endocrine investigations revealed hypopituitarism and she was started on hormone replacement therapy.

12. *Mal. J. Med. Scien. January 1998;5(1):51-53*

Adrenal Adenoma : A Common Cause of Secondary Hypertension

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A case of hypertension due to an adrenal adenoma in a 38-year-old patient was described. The methods of diagnosis and surgical treatment were discussed. Although secondary hypertension is uncommon, if the cause of hypertension can be detected, the patient could be cured of the hypertension and its sequelae can be avoided.