

EDITORIAL

UMBILICAL CORD BLOOD TRANSPLANT – WILL IT CHANGE THE MEDICAL SCENARIO IN MALAYSIA?

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Umbilical Cord Blood Transplant (UCBT) is a type of allogenic haematopoietic stem cell transplant. Stem cell transplantation as a mode of treatment of diseases was first successfully done by the pioneering work of a Nobel Prize Winner in Physiology or Medicine, E Donnall Thomas in 1957. Throughout the past 50 years, numerous other researchers have improved the techniques of this previously highly risky procedure. Among the notable landmark in haematopoietic stem cell transplant include immunosuppressive preparative regimen, improved control of infections, appearance of donor registries throughout the world and successful transplantation stories using haematopoietic stem cells from peripheral blood and the cord blood. These developments lead to a change in terminology from marrow transplantation to haematopoietic stem cell transplantation.

The source of cells used in the transplant process can come from the patient himself (autologous transplant) or a donor (allogenic transplant). In UCBT, the donor cells are derived from a byproduct of pregnancy namely the umbilical cord.

The first UCBT was reported in 1989 by Gluckman *et al* in a child with Fanconi anemia using cord blood from his HLA-matched twin sister. The use of cord blood as the source of stem cells has increased since then involving both paediatric and adult patients. The advantages of UCBT over bone marrow transplant include ease of collection and availability, no risk to the donor (mothers or newborn), low risk of viral transmission to the recipients, easy delivery process compared to freshly harvested bone marrow and importantly increased tolerance to HLA-mismatch.

The main disadvantage of using umbilical cord transplant is low stem cell content and slow engraftment compared to bone marrow transplant which over the years would probably be overcome as technology and experience improves. Research is ongoing to increase the number of stem cell content include using multiple units of cord blood and culture techniques to expand the UCB stem cells.

However, the ability of using minimally matched HLA has put the UCBT a favorable method of transplant over bone marrow transplant especially among the paediatric patients. Currently, throughout the world, there is an effort to set up either private or public cord blood banks which collect and store the cells over a period of time. Worldwide umbilical cord and bone marrow donor registry has reported that there are at least 61 stem cell donor registries from 44 countries, and 42 cord blood banks from 26 countries. On 28 May 2009, the registry website quoted 13,193,706 donor and cord blood units in its database. There is a growing scientific and ethical concern in the literature on the emergence of private cord bank throughout the world including Malaysia on justification of collecting umbilical cord for personal long term storage. However, in United Kingdom, Richard Branson has started the first world public-private UCB bank known as Virgin Health Bank of which 80% of sample will be placed in public and 20% in the private storage.

The use of umbilical cord blood haematopoietic stem cell transplant has been established in conditions such as leukemia, lymphoma, aplastic anaemia or various blood or autoimmune disorders. In fact, the greatest acceptance of this mode of treatment is in the field of haematology, especially in patients who would not benefit from prolonged chemotherapy or are resistant to it. Other indications include from inborn errors of metabolism to other diseases such as severe combined immunodeficiency, Fanconi anemia, sickle cell disease, myelodysplastic syndrome, lymphoma, Hodgkin's disease and medulloblastoma. The use of this procedure in neurological conditions is largely experimental in most cases but such as Metachromatic Leukodystrophy and Krabbes disease. Haemopoietic stem cells transplantation was first used in lysosomal disorders, before serious disease symptoms become apparent. The rationale of this is that enzymes produced from the transplanted stem cells will stop further degenerative processes in affected children. In lysosomal diseases such as Krabbes diseases (Globoid cell leukodystrophy) and Metachromatic Leukodystrophy, long term survival have been recorded, while in cases such as infantile Neuronal Ceroid Lipofuscinosis, definitive recommendations

cannot be made. Efforts are currently underway to assess the effectiveness of stem cell therapy in cases of chronic epilepsy.

It is a blessing that human is born together with a placenta with potential regenerative tissue. There is exciting recent development in regenerative medicine of potential usage of using cord stem cells instead of more controversial source of embryonic stem cells in repairing myocardial, hepatocytes, muscle and neural tissue. In future, with possibility of delaying the process of human aging and repairing tissue using placental and cord stem cells, one then realized that what was thought to be a byproduct of pregnancy is actually the fountain of youth born together with human.

In Malaysia, the experience of umbilical transplant was first reported by Chan from University of Malaya who reported the first successful umbilical cord transplant in 1999 involving a 25 month old beta-thalassaemia major boy. Last year, Gan *et al* has reported their adult haematopoietic stem transplant experience. In this issue, Chan *et al* has timely reported their 10 year experience in unrelated cord blood transplant in paediatric population. Its use in non haematological disorders is still not widespread in Malaysia but the scenario will most probably change over the next few years when better treatment regimes become available.

ACKNOWLEDGEMENT

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EDITORIAL

PANDEMIC INFLUENZA A (H1N1) 2009 IN MALAYSIA – THE NEXT PHASE

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In recent years, zoonotic RNA viruses such as Nipah, SARS coronavirus, avian influenza (H5N1) and Chikungunya have emerged with global impact. The latest has now been designated by World Health Organization (WHO) as pandemic (H1N1) 2009 virus. It was first reported as an outbreak in Mexico in April, and has now caused the first influenza pandemic since 1968. By July 11, 2009, there were 105,304 confirmed cases and 463 deaths in 143 countries, including 627 cases in Malaysia. The rapid spread of the disease has been matched by the speed of dissemination of information and protocols, coordinated by WHO. The experiences of SARS and H5N1 have been enormously beneficial in preparing the world for a pandemic.

Influenza A is an enveloped RNA virus containing 8 genomic segments. The haemagglutinin (H) and neuraminidase (N) surface proteins are key virulence determinants and elicit the main host immune response. There are 16 H and 9 N, which determine the influenza subtype. The segmented nature of the genome facilitates swapping of genes between virus strains co-infecting a single host. As influenza is principally an avian virus, this reassortment process mainly involves a vast pool of avian strains, generating countless variants. For unknown reasons, certain avian strains successfully cross species barriers to infect mammals, including human transmissibility has caused pandemics in 1918 (H1N1), 1957 (H2N2) and H3N2 have been circulating, and constantly mutating, which means the seasonal vaccines need to be changed annually. The current pandemic (H1N1) 2009 is a novel H1N1 strain not previously seen in humans, thus there is widespread susceptibility.

Epidemiological and Clinical Aspects

Clinically, pandemic (H1N1) 2009 infection resembles seasonal influenza. Most patients have fever, cough, sore throat, headache, dyspnoea, and myalgia, and some have diarrhea and vomiting. Most cases are mild. Deaths occur rarely, mainly due to severe pneumonia. About half involve previously healthy people. The rest have underlying conditions such as lung and cardiovascular disease, diabetes, immunosuppression, pregnancy, and, unexpectedly, obesity.

The often-quoted case fatality rate (CFR) of 0.4% is an overestimate, as it uses only confirmed cases as the denominator, and excludes mild, undiagnosed cases. Corrected CFR estimates are 0.0004-0.06%, although these estimates will be higher in places with fewer healthcare resources and greater prevalence of HIV and malnutrition. This would certainly include parts of Malaysia. Monitoring the true CFR is critical to detect changes in disease virulence. Also, differences in CFR between countries or populations may indicate local risk factors that require targeting. The task is more difficult as most countries are now screening selected cases rather than all suspect cases. In past pandemics, multiple disease waves of varying severity occurred over a few years. However, the extent of modern global travel and mixing may alter this pattern.

The vast majority of cases have occurred in those < 60 years. An increase in pneumonia and shift from older to younger age groups is characteristic of influenza pandemics. This observation is supported by the presence of preexisting immunity to the pandemic (H1N1) 2009 virus in 33% of people > 60 years, but rarely in those younger. This may be due to exposure of older people to H1N1 strains which are antigenically more similar to the current pandemic strain than recent seasonal H1N1 strains. The same study also showed that current seasonal influenza vaccines did not protect against the pandemic strain.

Origins of the Virus

The evolution of the pandemic (H1N1) 2009 virus is complex and fascinating (Table I). It is a reassortant of two distinct swine influenza lineages. Six genes originate from a swine virus first isolated in North American pigs in 1998. This was a triple-reassortant containing genes from avian H1N1, seasonal human H3N2, and North American classical swine H1N1. The classical swine H1N1 probably shared a common avian-like ancestor with the human H1N1 causing the 1918 pandemic. The other two genes of the pandemic (H1N1) 2009 virus are from Eurasian “avian-like” swine H1N1 viruses, which arose from the introduction of avian H1N1 into European pigs in 1979.

Table I : Origins of the Pandemic (H1N1) 2009 Virus

Gene	Recent Origin	Historical Origin
PB2	North American triple-reassortment swine	Avian H1N1
PB1	North American triple-reassortment swine	Human H3N2
PA	North American triple-reassortment swine	Avian H1N1
H	North American triple-reassortment swine	North American classical swine H1N1
NP	North American triple-reassortment swine	North American classical swine H1N1
N	Eurasian “avian-like” swine H1N1	Avian H1N1
M	Eurasian “avian-like” swine H1N1	Avian H1N1
NS	North American triple-reassortment swine	North American classical swine H1N1

PB2, polymerase PB2; PB1, polymerase PB1; PA, polymerase PA; H, haemagglutinin; NP, nuclear protein; N, neuraminidase; M, matrix protein; NS, nonstructural proteins.

Although the current pandemic strain probably arose in pigs, the only documented swine infections with the pandemic virus to date occurred after the first reported human cases in April 2009, in Canada and Argentina. The pandemic strain probably circulated undetected amongst pigs for some years in countries with no surveillance of swine influenza. Pigs have tracheal cell receptors for influenza viruses which are similar to birds and humans. Thus, pigs can be “mixing vessels” for reassortment of avian, swine and human influenza. However, influenza surveillance in swine has lagged behind that of humans and birds, as the disease in swine is mild and has little commercial impact. An opportunity to foresee a potential pandemic strain was missed. With the concurrent risk of a panzootic, or worldwide outbreak amongst swine, surveillance of pigs is now a priority. This is particularly critical, yet difficult, in countries with rudimentary pig farming, where pigs mix freely with birds.

The naming of the virus has been controversial, particularly the media-friendly term “swine flu”. This has been rejected by WHO as inaccurate and simplistic. The pandemic (H1N1) 2009 virus contains genes from swine, avian and human influenza sources. Furthermore, previous human infections with true “swine influenza” were rare, and involved direct contact with pigs, just as “avian” influenza (H5N1) is acquired from infected birds. Currently, swine play no active role in the ongoing pandemic. Although its recent genetic origin is swine-related, the pandemic (H1N1) 2009 virus is clearly behaving as a human influenza strain, as it transmits easily between humans.

Situation in Malaysia

The first case of pandemic (H1N1) 2009 in Malaysia was reported on May 15. The Ministry of Health (MOH) immediately responded with measures to contain disease spread. Containment focused on active case finding and robust control of contacts. Cases and contacts were placed under home quarantine orders, and given oseltamivir (Tamiflu). In accordance with WHO recommendations, no travel restrictions were made. Instead, travel advisories were issued regarding countries with extensive local spread, including USA and Australia. Some control measures, such as airport screening, have caused debate. They were perceived to incur unsustainable costs and social disruption incommensurate with the mildness of the disease. Also, there is a lack of data on their effectiveness. Nevertheless, it is likely that containment bought some valuable time. By delaying and flattening the inevitable epidemic peak, the nation made preparations such as training staff, and stockpiling antivirals, antibiotics, personal protective equipment, laboratory supplies, and so on.

On June 11, WHO raised the pandemic alert to level 6. At this point, Malaysia had 11 confirmed cases, all imported. Initially, most imported cases were from USA. In recent weeks, most imported cases have been from the Asia-Pacific region, mainly Australia, Indonesia, Thailand and Singapore. The first locally-acquired case was diagnosed on June 17. The incidence of total and locally-transmitted cases continued to rise (*Please refer to Figure 1, page 107 of the Journal*). The two largest clusters of cases to date started in late June, at a conference in Penang (20 cases), and a school in Cheras, Kuala Lumpur (18 cases). By 9 July, the number of local transmissions had risen to 159 (27.7%) of 574 cases. With sustained community spread, and detection of new cases with no defined links with existing cases, it seemed that the disease could no longer be contained. On the same day, the MOH declared that Malaysia would be

moving from containment to a mitigation strategy. Many other countries have also done this, in keeping with international guidance.

Mitigation focuses primarily on managing disease impact on health and society, rather than containing spread. The aims are to reduce disease-related morbidity and mortality, slow the spread of disease, and ensure running of essential services. Hospital admission, laboratory diagnosis and antivirals will be limited to selected patients with moderate or severe disease, and those at risk of severe disease. Mild cases will be managed at home, to prioritize healthcare resources for severe cases. Individuals will be expected to take responsibility and practice personal measures. These include social distancing (keeping one meter away from others, and avoiding crowds), cough etiquette, frequent handwashing, self-quarantine if ill, and household ventilation. Resource-intensive measures such as screening, tracing and quarantining contacts will be phased out. There will be continued monitoring of unusual clusters or severe cases which may indicate a change in viral virulence or transmissibility.

The restriction of antivirals to selected cases may be difficult for the public to accept. However, indiscriminate use of oseltamivir has led to the first oseltamivir-resistant strains of the pandemic (H1N1) 2009 virus. Up to 64% of seasonal influenza A (H1N1) viruses have a single neuraminidase mutation conferring oseltamivir, including 44% of Malaysian isolates. As resistance is so easily acquired, the effectiveness of oseltamivir in this pandemic may soon be lost. Unfortunately, many countries, including Malaysia, have stockpiled oseltamivir. Pandemic (H1N1) 2009 virus is still susceptible to zanamivir (Relenza), which has the disadvantage that it is inhaled rather than taken orally. The most effective means of control is vaccination. However, an effective vaccine will not be available for several months. There is also insufficient manufacturing capacity for the whole world, and at least the first 600 million doses have been pre-purchased by developed countries. Thus, poorer countries may have limited access to vaccines, even in the medium term.

Some argue that the focus on the pandemic has detracted from other priority diseases such as tuberculosis and dengue. This is a difficult issue. The pandemic has an estimated reproduction number (RO, the average number of secondary cases arising from each case) of 1.4-1.6, compared to estimates from previous pandemics of 1.4-2.0. This may result in clinical attack rates of at least 25%. The health and socioeconomic impact on Malaysia could be considerable.

Malaysia's move to a mitigation strategy is acknowledgement of the relentless spread of pandemic (H1N1) 2009. Mortality appears low amongst the healthy, so the focus is now on vulnerable at-risk groups. There will be possible shortages in effective antivirals and vaccines, two key components in pandemic control. Effective leadership and communication, particularly in view of rapidly evolving knowledge, will be critical as we face the challenges of this novel virus in the months ahead.

ORIGINAL ARTICLES

DAYTIME SLEEPINESS AND SLEEP QUALITY AMONG MALAYSIAN MEDICAL STUDENTS

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Summary

Poor sleep quality and daytime somnolence is reported to be associated with cardiovascular events, road traffic accident, poor academic performance and psychological distress. Some studies documented that it is prevalent in most populations but its frequency among medical students has not been documented in Malaysia. This is a self-administered questionnaire survey of medical students from International Medical University, Malaysia. Daytime sleepiness of medical students was assessed using Epworth Sleepiness Scale (ESS). Student scoring $ESS \geq 11$ was regarded as having excessive daytime sleepiness. Psychological distress was measured using 12-item General Health Questionnaire (GHQ-12). A total of 799 medical students participated in this survey (response rate 69.5%). Daytime sleepiness occurred in 35.5%, psychological distress was present in 41.8% and 16.1% reported bad sleep quality and psychological distress; but unrelated to the number of hours sleep at night. We have documented high prevalence of daytime sleepiness, poor sleep quality and psychological distress. Higher frequency among clinical students and the significant relationship with psychological distress suggest possible link to the stressful clinical training.

Key Words : Sleep Quality, Daytime Sleepiness, Medical Students

ARE INDIANS AND FEMALES LESS TOLERANT TO PAIN? AN OBSERVATIONAL STUDY USING A LABORATORY PAIN MODEL

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Summary

In Malaysia, it is a common belief among health care workers that females and Indians have lower pain threshold. This experience, although based on anecdotal experience in the healthcare setting, does not allow differentiation between pain tolerance, and pain expression. To determine whether there is a difference in the tolerance to pain between the three main ethnic groups, namely the Malays, Chinese and Indians as well as between males and females. This was a prospective study, using a laboratory pain model (ischaemic pain tolerance) to determine the pain tolerance of 152 IMU medical students. The mean age of the students was 21.8 years (range 18-29 years). All of them were unmarried. The median of ischaemic pain tolerance for Malays, Chinese and Indians were 639s, 695s and 613s respectively ($p = 0.779$). However, statistically significant difference in ischaemic pain tolerance for male and female Indian students was observed. Possible ethnic difference in pain tolerance in casual observation is not verified by this laboratory pain model. Difference in pain tolerance between genders is shown only for Indians.

Key Words : Ischaemic Pain Tolerance (IPTO), Gender, Race, General Health Questionnaire (GHQ)

COMPARISON BETWEEN PRELOADING WITH 10 ML/KG AND 20 ML/KG OF RINGER'S LACTATE IN PREVENTING HYPOTENSION DURING SPINAL ANAESTHESIA FOR CAESAREAN SECTION

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Summary

This prospective, randomized study was designed to compare the effect of two different preloading volumes of Ringer's lactate for prevention of maternal hypotension induced by spinal anaesthesia for Caesarean section. Eighty ASA I or II obstetric patients were randomized to two groups. Group 1 (n=40) received 20 ml/kg of Ringer's lactate and Group 2 (n=40) 10 ml/kg of Ringer's lactate over 20 minutes before spinal anaesthesia. The lowest mean arterial pressure (MAP) for both groups was recorded at 15 minutes after giving spinal anaesthesia. This difference in the drop of MAP from base line at 15 minutes (mean decrease of 12.5 mmHg from baseline), between preloading with 10 ml/kg and 20 ml/kg of Ringer's was statistically significant. Twelve patients from Group 1 required bolus doses of ephedrine and 15% of these needed additional crystalloid whereas two patients from Group 2 needed ephedrine boluses and 22% of these required additional crystalloid. The difference in frequency of requirement for treatment of hypotension was not statistically significant. There were five patients in Group 1 and six patients in Group 2 who experienced nausea and vomiting, the frequency of occurrence did not show any statistically significant difference between the two groups. In conclusion, for prevention of hypotension during spinal anaesthesia for Caesarean section, infusing 20 ml/kg or 10 ml/kg of Ringer's Lactate gave similar results and we do not recommend the use of a larger volume of crystalloid for preloading before spinal anaesthesia.

Key Words : Spinal Anaesthesia, Hypotension, Caesarean Section, Preloading

KNOWLEDGE, ATTITUDE AND VACCINATION STATUS OF VARICELLA AMONG STUDENTS OF UNIVERSITI KEBANGSAAN MALAYSIA (UKM)

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Summary

Varicella is a highly infectious disease that can lead to severe complications such as pneumonia, encephalitis and death. Vaccination is the best method to prevent the disease. The objective of this study was to assess the level of knowledge, attitude and vaccination status of varicella among UKM students. A cross sectional study involving pre-tested questionnaires was undertaken between February and April, 2005. Questionnaires were distributed and filled by the first and second year students from four faculties in UKM (n=879). The faculties included were divided into two categories : medical fields and non medical fields. The results showed that the overall level of knowledge on varicella among respondents was intermediate. The score of knowledge was significantly higher among medical students ($t=10.9$, $p<0.05$) compared to non medical students. The varicella vaccination coverage was low among UKM students (19.3%). The vaccination status was significantly higher among medical students compared to non medical students ($\chi^2=2.42$, $p>0.05$). In conclusion the awareness and vaccination status of varicella among UKM students were low. More varicella awareness programs should be held on universities' campuses to educate students on methods of prevention of this serious disease.

Key Words : Varicella, Universiti Kebangsaan Malaysia, Knowledge, Vaccination

UNRELATED CORD BLOOD TRANSPLANTATION IN CHILDREN – A 10-YEAR EXPERIENCE FROM UMMC

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Summary

Children who would benefit from a haematopoietic stem cell transplantation often lacked a compatible sibling donor. Unrelated cord blood transplantation was offered as an alternative donor source for patients with a variety of malignant and non malignant diseases who had no further treatment options. Cord blood units were sourced from various international cord blood registries. The median nucleated and CD34+ cell doses were $8.7 \times 10^7/\text{kg}$ and $2.6 \times 10^5/\text{kg}$ respectively. In spite of adequate cell doses, a high rate of non engraftment of 32% was observed. Acute graft-versus-host disease (GVHD) occurred in 14 out of the 15 patients who engrafted with 53% being grade III to IV GVHD. The five year disease free survival was 40.7% with infection and GVHD being the commonest causes of death. The five year disease free survival was 20.5% and 60.7% for malignant and non malignant diseases respectively.

Key Words : Children, Unrelated Cord Blood Transplantation, Survival

OPHTHALMOLOGY INPATIENT CONSULTATION : DOES IT MAKE A DIFFERENCE TO INPATIENT MANAGEMENT?

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Summary

Ophthalmology consultation is one of the commonest requested services for inpatients in a tertiary hospital. A total of 290 ophthalmology consultations requests were received over a period of six months (average 12 consultation requests per week) and from these, 222 patients were examined. The patient demographics, the hospitalization data, type of consultations (screening, new problem, pre existing problem), reasons for consultations and the ophthalmology diagnosis were determined. Out of 290 consultation requests, internal medicine services requested the highest number (95, 32.8%); the commonest type of consultation was screening for eye diseases (161, 55.5%) and the most common reason for consultation was to rule out diabetic retinopathy (125, 43.1%). The top five ophthalmology diagnoses after examination were diabetic retinopathy (45, 20.3%), diabetic retinopathy ruled out (37, 16.6%), conjunctivitis (12, 5.4%), refractive error (11, 4.8%) and normal ocular examination (11, 49%). Inpatient ophthalmologic procedures were performed in 146 patients, the commonest of which was retinal laser photocoagulation. A total of 133 (59.9%) inpatients had a change in their management as a result of the ophthalmology consultation.

Key Words : Ophthalmology Consultation, Diabetic Retinopathy, Red Eyes, Decreased Vision, Eye Evaluation

PREVALENCE OF DEPRESSION AND ITS ASSOCIATED FACTORS AMONG ELDERLY PATIENTS IN OUTPATIENT CLINIC OF UNIVERSITI SAINS MALAYSIA HOSPITAL

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Summary

Depression among elderly primary care patients is a serious problem with significant morbidity and mortality. This is a cross sectional study to determine the prevalence of depression and its associated factors among the elderly patients attending the outpatient clinic, Universiti Sains Malaysia Hospital. This study utilized Malay version Geriatric Depression Scale 14 (M-GDS 14) to screen for elderly depression among Malaysian population. It also looked into associated risk factors for elderly depression using socio-demographic, family dynamics and medically related questionnaires. Out of 244 subjects, 34 or 13.9% were found to have depression. Three variables were found to be significantly associated with depression. Elderly patient with any illness that limits the patient's activity or mobility has more risk of developing depression (OR 2.68 CI 1.15-6.24). Elderly patients who were satisfied with their personal incomes (OR 0.29 CI 0.10-0.85), and who had children or son/daughter-in-law to take care of them when they are sick (OR 0.10 CI 0.01-0.83) have a lower chance of having depression. Screening the elderly for depression, would help in diagnosing the elderly depression better and offer them the treatment needed.

Key Words : Elderly, Geriatric, Depression

PROPORTION OF DEMENTIA AND ITS ASSOCIATED AMONG ELDERLY PATIENTS ATTENDING OUTPATIENT CLINICS OF UNIVERSITI SAINS MALAYSIA HOSPITAL

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Summary

The increase in life expectancy observed over the last decade has particular relevance for conditions such as cognitive decline and dementia. This is a cross sectional study to determine the rate of dementia and to identify its associated factors among 399 elderly patients attending outpatient clinics of Universiti Sains Malaysia Hospital. This study was conducted in 2 phases. In the first phase, the literate subjects were screened using validated Malay version of Mini Mental State Examination (MMSE) and the illiterate subjects with Malay version of Elderly Cognitive Assessment Questionnaire (ECAQ). All subjects suspected to have dementia were selected for further evaluation in phase 2 of this study. The second phase involved full clinical examination in order to establish clinical diagnosis of dementia. The proportion of dementia in this study was 2.5% (10). Although history of exposure to pesticide ($p < 0.05$) and history of stroke ($p < 0.05$) were significant, they were not significant factors. These were because vast discrepancy in number between those exposed to pesticide and having stroke between dementia and non dementia.

Key Words : Cognitive Impairment, Dementia, Elderly, Geriatric

THE EPIDEMIOLOGY AND BURDEN OF CHILDHOOD ROTAVIRUS INFECTION IN A TERTIARY HOSPITAL IN SABAH, MALAYSIA

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Summary

We aimed to determine the epidemiology and burden of rotavirus (RV) gastroenteritis (GE) in children requiring hospital care in an urban setting in Sabah, Malaysia. A prospective study of all patients younger than 12 years of age admitted with acute GE to Queen Elizabeth Hospital, Sabah, over a six-month period (October 2005 to March 2006) was conducted. During the study period, a total of 167 children with acute GE who had stool samples examined for RV were studied. RV accounted for 16% of all diarrhoeal cases and 1.7% of all admissions to the children's wards during the study period. There was no difference in severity of GE between RV and non-RV groups. RV infection is a common cause of childhood GE requiring hospital care in Sabah.

Key Words : Childhood Rotavirus Infection, Sabah

A MULTICENTER STUDY IN MALAYSIA TO DETERMINE THE EFFICACY AND SAFETY OF A GENERIC ATORVASTATIN

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Summary

A multicenter study was conducted to assess the efficacy of a generic form of Atorvastatin (Ranbaxy's Storvas®) in the treatment of Primary Hypercholesterolemia. One hundred and nineteen patients were given 10mg of Storvas® for four weeks and increased to 20mg if target LDL-Cholesterol was not achieved. LDL-Cholesterol was reduced by 36.6% at four weeks and 37.5% at eight weeks from baseline. Total cholesterol and triglycerides were significantly reduced. There were no drug-related serious adverse effects. We conclude that the generic atorvastatin is safe and effective in the treatment of primary hypercholesterolaemia and the results are comparable to published data on innovator atorvastatin.

Key Words : Hypercholesterolaemia, Coronary Heart Disease (CHD), 3-Hydroxy-3 Methylglutaryl-Coenzyme A (HMG-CoA) Reductase Inhibitors, Generic Statins, Atorvastatin, Storvas

OUTCOME OF PATIENTS PRESENTING WITH IDIOPATHIC FACIAL NERVE PARALYSIS (BELL'S PALSY) IN A TERTIARY CENTRE – A FIVE YEAR EXPERIENCE

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Summary

This is a retrospective study. The objective of this study is to review the factors influencing the outcome of treatment for the patients presented with idiopathic facial nerve paralysis. The demographic data, clinical presentation and management of 84 patients with idiopathic facial nerve paralysis (Bell's palsy) were collected from the medical record office, reviewed and analyzed from 2000 to 2005. Thirty four (72.3%) out of 47 patients who were treated with oral prednisolone alone, fully recovered from Bell's palsy meanwhile 36 (97%) out of 37 patients who were treated with combination of oral prednisolone and acyclovir fully recovered. The difference was statistically significant. 42 (93.3%) out of 45 patients who presented within three days to our clinic, fully recovered while 28 (71.8%) out of 39 patients presented later than three days had full recovery from Bell's palsy. The difference was statistically significant. The outcome of full recovery is better with the patients treated with combined acyclovir and prednisolone compared with prednisolone alone. The patients who were treated after three days of clinical presentation, who were more than 50 years of age, who had concurrent chronic medical illness and facial nerve paralysis HB Grade IV to VI during initial presentation have reduced chance of full recovery of facial nerve paralysis.

Key Words : Bell's Palsy, Idiopathic Facial Nerve Paralysis, Outcome

LONG TERM RESULTS OF ENDOSCOPIC RESECTION OF NASOPHARYNGEAL TUMOURS

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Summary

Traditional open approaches to the nasopharynx either provide limited access and risk significant morbidity. Here we describe our experience with endoscopic resection of nasopharyngeal tumors. Retrospective chart review was performed for all patients who underwent endoscopic nasopharyngeal resection from September 1993 to January 2007 at a tertiary rhinology centre. Six patients underwent endoscopic nasopharyngectomy for tumors arising from or involving the nasopharynx. The mean age was 49.8 years (range 23-70). The sex distribution was five males and one female. Four tumors were malignant and two were benign. The mean disease-free and overall survival for malignant tumors was 90.75 months (range 66-120 months). None of the benign tumors recurred. The endoscopic nasopharyngectomy technique may be successfully used for resection of tumors arising from or involving the nasopharynx with good efficacy and a decrease in morbidity when compared to open approaches.

Key Words : Endoscopic Surgery, Nasopharyngectomy, Nasopharyngeal Carcinoma, Tumors, Recurrent

TREATMENT DELAY IN RECTAL CANCER

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Summary

Early diagnosis of rectal cancer is important for prompt treatment and better outcome. Little data exists for comparison or to set standards. The primary objective of this study is to identify factors resulting in delays in treatment of rectal cancer, the correlation between the disease stage and diagnosis waiting time, treatment waiting time and duration of symptoms. A five year retrospective audit was undertaken in University of Malaya Medical Centre (UMMC). There were 137 patients recruited and the median time to diagnosis was nine days after the first UMMC Surgical Unit consultation with a mean of 18.7 days. Some 11% had to wait more than four weeks for diagnosis. The median time from confirmation of diagnosis to surgery was 11 days with a mean of 18.6 days. Sixty two percent of patients were operated upon within two weeks of diagnosis and more than 88% by four weeks. However, 10% of them had delayed surgery done four weeks after diagnosis. Long colonoscopy waiting time was the main cause for delay in diagnosis while delays in staging CTs were the main reason for treatment delays.

Key Words : Rectal Cancer, Diagnosis Waiting Time, Treatment Waiting Time