it can be reasonably assumed that all medically certified and inspected deaths covers most deaths in urban areas and some deaths in the rural areas. This could be explained by the locations of hospitals in Peninsular Malaysia. Each state will have a general hospital and one or more district hospitals. All general hospitals are located in the capital town of the respective state. General hospitals are the referral centres for other hospitals in the state. The General Hospital of Kuala Lumpur caters for the population in the city, but it is also the referral centre for all the general hospitals in the various states.

Coronary heart disease mortality from 1968-1971

This analysis is based on medically certified and inspected deaths from 1968 to 1971 as reported by the Registrar General, Malaysia. The average number of deaths in specific age groups for Chinese, Malay and Indian males and females for the period between 1968 and 1971 were divided by the estimated urban population of the three races in the specific age groups using the 1970 population census figures to obtain the age specific mortality rate.

In carrying out this analysis the assumptions that have been made are:

i) The percentage distribution of population in various age groups among the urban population of Chinese, Malays and Indians are the same as in the overall population.

ii) The male to female ratio of the urban population of Chinese, Malays and Indians are the same as in the overall population.

In the 1970 population census the distribution of urban and rural population was 28.8 and 71.2 per cent respectively, and of the Chinese, Malays and Indians, 47.6%, 14.9% and 34.6% respectively lived in urban areas[8]. Table III shows the distribution of urban Chinese, Malays and Indians population aged 30 to 60 years in ten-year intervals and the mortality rate due to arteriosclerotic and degenerative heart disease (402-422, 7th revision of the International Classification of Diseases and Causes of Death). Between 1968 and 1971 the mortality rates per 100,000 population in the age group 30 to 69 years, for coronary heart disease in males were 105.6 in Chinese, 14.3 in Malays and 367.2 in Indians. Taking into account the limitation of the population estimates, there is the suggestion that coronary heart disease is more common in Indians. In all ethnic groups, males had a higher mortality rate than the females. Chinese had the lowest mortality rate in both sexes and in all age groups except for females in the 60-69 years group. The differences in mortality rate between Indians and Chinese were highest among the 30-39 age group and fell gradually as age decreased. In the overall age group (30-69 years) for males, the mortality rate among male Indians was 3.5 times that of Chinese and 2.6 times the Malays. The findings of this analysis are comparable to that by Hughes[2] for the Chinese, Malays and Indians in Singapore.

Safiah Mohd. Yusof & Barrie M Margetts
Institute of Human Nutrition
University of Southampton
United Kingdom

References

1. Khoo KL, Tan H, Khoo TH. Cardiovascular mortality in Peninsular Malaysia: 1950-1989. Med J Malaysia 1991;45(1) : 7-20.

2. Hughes K, Lun KC, Yeo PPB. Cardiovascular diseases in Chinese, Malays and Indians in Singapore. I. Differences in mortality. J Epidemiol & Comm Health 1990;44 : 24-8.

3. Khoo TH. Vital statistics Peninsular Malaysia 1990. Dept. of Statistics Malaysia, Kuala Lumpur, 1992.

Epidural Blood Patch for Post Dural Puncture Headache

Sir,

The incidence of post dural puncture headache (PDPH) varies from 4 – 60% , while the severity of symptoms varies from a mild headache to the severely

incapacitating postural headache associated with nausea, vomiting, dizziness and diplopia. When this occurs following spinal anaesthesia for relatively minor surgery it can lead to financial, physical and psychological burden to patients.

The most likely cause for PDPH is leakage of cerebrospinal fluid from a hole in the dura, the remarkable feature being that such a trivial injury can cause such severe symptoms. Conservative management with bed rest, analgesics and fluids is helpful in those with mild symptoms. Relief however, is not dramatic and sealing that hole in the dura is the only way to achieve rapid relief. Gromley (1960)[1] was the first to report on the use of autologous blood into the epidural space to "patch" the hole and there have been many reports of success with this technique with some authors even advocating its prophylactic use[2]. We would like to share our local experience with this method of relief of "spinal headache".

Eight patients developed severe PDPH over a period of 16 months during which time 107 spinal anaesthetics were performed. There were 5 females and 3 males with a mean age of 35 ± 9 years. Seven patients developed severe headache within 48 hours after the spinal anaesthetic. One patient (31/F) developed symptoms of PDPH twice; following a spinal anaesthetic for a D & C and after a general anaesthetic for a repeat D & C. One patient (52/M) presented himself at the A & E department with severe PDPH 7 days after a spinal anaesthetic for a herniorrhaphy.

Epidural blood patches were offered to all patients within twenty-four hours after instituting conservative management. Two patients refused. 7 epidural blood patches were done in 6 patients. Twenty ml of venous blood was drawn from the patient using an aseptic technique and injected slowly into the epidural space. The injection was stopped if the patient complained of backache or shooting pain down one leg. The average volume of blood used was 13 ± 5 ml.

All patients had dramatic relief of their symptoms soon after the blood patch and could be discharged the next day. Two patients complained of slight backache and pain down one leg which resolved in a day with simple analgesics. One long term follow up study[3] has shown EBP to be a safe, effective method of treating PDPH provided the proper diagnosis is made and adequate precautions taken in performing it.

We feel that an epidural blood patch should be offered to all patients who develop severe PDPH from any cause – spinal anaesthesia, diagnostic lumbar puncture or a lumbar myelogram – and who do not get relief from twenty-four hours of conservative management. It can cut down a lot of unnecessary suffering.

R Vijayan, FRCA
L Chan, FANZCA
Department of Anaesthesiology,
University of Malaya, 59100 Kuala Lumpur

References

1. Gromley JB. Treatment of postspinal headache. Anaesthesiology 1960;21 : 565-6.
2. Cheek TG, Banner R, Sauter J, Gutche B. Prophylactic extradural blood patch is effective. British Journal of Anaesthesia 1988;61 : 340-2.
3. Abouleish E, Vega S, Blendinger I, Tio TO. Long term follow up of epidural blood patch. Anaesthesia and Analgesia 1975;54 : 459-62.

Hereditary Angioedema: Report of a Family in Malaysia

Sir,

Hereditary angioedema (hereditary angioneurotic oedema, HAE) is a rare cause of angioedema[1]. It is frequently mismanaged. Antihistamines and corticosteroids have little response. We are not aware of its report in the East. We report a Chinese family with HAE in Malaysia.

The elder brother presented at 18 years old with repeated episodes of limb swelling. The swellings were tender, erythematous but non-pruritic. HAE was confirmed as his C1 esterase inhibitor level was low