STROKE – TIME FOR GREATER EFFORTS AND ENTHUSIASM

Stroke is a very common clinical problem. It has been estimated that in the United Kingdom, the lifetime cumulative incidence of stroke is one in three in the population, and the mortality from stroke is one in seven. There are evidences to support that stroke incidence is higher in the developing as compared with the developed world. The WHO's MONICA Project provides a standardised comparative data of stroke incidence in 17 populations mainly from Europe during the period 1985 to 1990. Novosibirsk from Russia ranked number one for both men and women in this multinational "league table" for stroke occurrence (1). Beijing was the only oriental population represented in this study. The stroke attack rate ranked sixth among men and second among women. Stroke is not just a problem in the elderly. In the University Hospital, Kuala Lumpur's Stroke Registry, out of the 413 stroke patients seen in year 1994, half of the patients were ≤62 years and 19% were ≤ 50 years (2). Thus, in Malaysia, more than half of the stroke patients were of middle age or younger. Not only does stroke carry a significant mortality, it also often has a devastating effect on the patient's physical and mental function, resulting in dramatic changes in the daily life of the patients and their families.

On the other hand, there are grounds for optimism in the prevention and treatment of stroke. There has been a decrease in stroke mortality between 3% to 5% per annum in most Western countries over the period from 1970 to 1985 (3). Similar trend was also seen in the neighbouring Singapore, the age and sex-standardised mortality rates declined from 99/100,000 in 1976 to 59/100,000 in 1994 (4). Unfortunately, no reliable stroke mortality trend is available in Malaysia. However, the Ministry of Health has reported stroke as accounting for about 10% of death in the Government Hospitals. The decline in the mortality is probably due to decreasing severity as well as incidence of stroke, although the data supporting the later is conflicting.

In mainland China, a door-to-door survey in six cities in 1983 showed a marked geographical variation in the incidence of stroke. The northeast city of Harbin had the highest figure of 441 per 100,000 population, while the southwest city of Chengdu had the lowest of 136 per 100,000 population (5). Another survey between 1986 to 1990 yielded similar results, with the Harbin at 486 per 100,000 population, and Shanghai had 81, per 100,000, a six folds difference (6). A study from Taiwan showed that the annual incidence of stroke in the rural areas was twice that in the urban (7).

The declining stroke mortality and the wide variations in stroke incidence among populations with similar racial origins demonstrate the importance of modifiable risk factors in stroke. Stroke is clearly a largely preventable condition. The known modifiable risk factors related to life-style are: smoking, alcohol, obesity, physical activity, oral contraceptives, diet particularly salt and lipid. The risk factors which can be modified by medications or surgical procedures are: hypertension, atrial fibrillation, transient ischaemic attack, carotid stenosis, diabetes mellitus and lipid status (8).

There are also significant recent advances in the treatment of stroke. In particular, thrombolysis with recombinant tissue plasminogen activator (rt-PA) for ischaemic stroke within the first three hours of onset is able to improve the neurological outcome (9). Patients treated by a stroke team in a stroke unit is also able to reduce the mortality, morbidity, disability, institutionalisation, length of stay and health costs of the patients (10).

It is not just the Malaysian medical professionals who often have a nihilistic attitude to stroke and place stroke in low priority. According to information from the National Institute of Health in US, the money spent on research per death for 1996 was US$ 43,207 for AIDS, US$ 4,723 for cancer, US$ 1,270 for heart diseases, but only US$ 750 for stroke. It is time we change our priority and devote more efforts and enthusiasm for stroke.

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