Neurological Letter from Niphon Poungvarin

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Thailand, the land of smiles, is about the size of France but with the population of the UK (65 million), located in the middle of South-East Asia. The northern part borders China, Laos and Myanmar, the eastern part Cambodia and Laos, the western part Myanmar, and the southern part borders Malaysia. The shape of the country is similar to an elephant head with a long trunk down into the Pacific and Indian Oceans. The majority of the people (up to 95%) are Buddhist and there are more than 20 hilltribe minorities along the borders (about 2 million people), racially totally unrelated to Thais.

Thailand has a monarchy under the constitution. King Bhumibol Adulyadej the Great has been on the throne for 54 years, the longest reigning monarch in the world and also in Thai history. His Royal Highness is beloved by all Thai subjects as he has always concentrated all his efforts for the benefit of the people, not only Thais but also the hilltribe people and refugees from Vietnam, Laos, Cambodia and recently from Myanmar. More than 12,500 Royal Projects have been initiated and launched by the King in the past 50 years in various aspects of agriculture, education, health, industry, tourism, local products, communication and information technology. One example is the successful change in the occupation of Hmong hilltribe villagers (in the Golden Triangle Area) from growing opium to harvesting plant crops, coffee and fruit trees. This has eliminated heroin production and reduced drug-addiction in Thailand as well as in the rest of the world. His Majesty King Bhumibol of Thailand is the strongest symbol of the country, unifying all the Thai population (King Bhumibol 2000).

In Thailand, neurological diseases are very prevalent and rank fourth in the community hospitals, third in the general hospitals and second in the university hospitals (Viriyavejakul 1990). In the Siriraj Hospital Medical School neurological diseases have the highest mortality (24%) among the in-patients of the Department of Medicine (Viriyavejakul & Poungvarin 1982). There are 200 board-certified neurologists in Thailand, only one per 315,000 population. Outside Bangkok the situation is even worse because 85% of the neurologists work in Bangkok (about 8 million population).

Not surprisingly, most Thai neurologists have to work at least 16 h a day, six days a week. Each one sees 30–60 patients at every out-patient session (3–4 h), a number by no means unusual for neurologists in developing countries. Indeed, neurological practice is mainly out-patient based. Clearly neurologists are in short supply and they have to work hard. But they are happy and morale is good because it is the belief of Buddhism that when you do good things, good things will be yours in return.

All neurologists have some interest in certain areas such as stroke, movement disorders, epilepsy, headache, dementia, and so on. Infectious neurological conditions are still prevalent in Thailand - tuberculous meningitis, encephalitis (especially Japanese B) (Viriyavejakul et al. 1984), cisticercosis, cryptococcal meningitis, eosinophilic meningitis (angioglycylus gnathostomiiasis), brain abscess, rabies, tetanus and even the rare primary amoebic meningoencephalitis (Poungvarin & Jariyua 1991; Poungvarin 2001). AIDS is a big public health problem as approximately 1 million of the population are seropositive and 100,000 patients have full-blown AIDS. This situation is now overwhelming because AIDS is almost
One of the Royal Projects that has changed the life of the hilltribe people – growing flowers for show, not poppies for heroin.
A neurologist conducting an outpatient clinic

Dementia is now very much in the forefront of the public mind because of repeated recent exposure in the media. Interestingly, the diagnosis of Alzheimer’s disease was abused by the media 10 years ago when it was used to discredit one of our leading politicians.

Epilepsy is the most frequent condition in paediatric as well as adult neurology. Post-traumatic epilepsy and cerebral cysticercosis are the two most common causes of symptomatic epilepsy, indeed car accidents are still the number one cause of death in Thailand. Indeed, during the Songkran festival (Thailand’s New Year, 13–16 April in 2003) more than 600 people were killed and 30000 injured in traffic accidents. One difficulty with our local epilepsy management is always in the differential diagnosis of any clinical presentation in neurology, as it is in South Africa according to Roland Eastman’s neurological letter to Practical Neurology (Eastman 2003). For example, a young man presenting with persisting headache for two weeks without meningeal irritation and afebrile turned out to have cryptococcal meningitis and was HIV seropositive.

However, non-communicable neurological diseases are by no means less important. Stroke is very common with a prevalence in Bangkok of 690 per 100 000 aged over 20 years (Viriyavejakul et al. 1985). Primary intracerebral haemorrhage accounts for 25% of all stroke and is due to poorly controlled hypertension. Stroke is very much in the forefront of the public mind because of repeated recent exposure in the media. Interestingly, the diagnosis of Alzheimer’s disease was abused by the media 10 years ago when it was used to discredit one of our leading politicians.

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Vertigo is diagnosed extremely frequently by general practitioners in Thailand. Patients are usually referred to neurologists or otologists for a definite diagnosis and management. Benign paroxysmal positional vertigo is very common and underdiagnosed but most patients are subjected to several medications ranging from antihistamines, labyrinthine sedatives (e.g. cin-narizine), calcium channel blockers and antidepressants. Hallpike and Epley manoeuvres are rarely performed but they are extremely effective for diagnosis and treatment, respectively, without the need for drug therapy (Mekawichi & Poungvarin 2003).

Neurological investigations in Thailand are up to date, including functional MR imaging and spectroscopy, CT scan, SPECT brain scan and transcranial Doppler (Poungvarin 1990). However, we encourage our young doctors to make diagnoses by relying mainly on the history and examination, similar to the British system, with minimal use of investigations. The good physicians are the ones who investigate little.

We now qualify 20 board-certified neurologists each year and these days several international conferences in many disciplines of medicine are held in Thailand. Hopefully we will be hosting the World Congress of Neurology in 2009, after Sydney in 2005.

REFERENCES
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