

Teaching Neuro-Ophthalmology in the Asia-Pacific Region and China: A Personal Perspective

Abstract: Over the last 30 years, I have been involved in a number of projects helping to educate and train local ophthalmologists in many parts of Asia and the Pacific Islands, which lack adequate training and service in neuro-ophthalmology. In this article, I offer an overview of a number of different teaching initiatives and offer practical suggestions to anyone who might wish to become involved.

There are many excellent neuro-ophthalmic centers in Asia such as those in Singapore, Hong Kong, and various cities in Korea and China. However, many parts of Asia and the Pacific Islands lack adequate training and patient care in neuro-ophthalmology. Over the last 30 years, I have been involved in a number of projects directed at helping to educate and train local ophthalmologists (Table 1). In this article, I would like to share my experiences and offer suggestions to anyone who might also be interested in becoming involved.

Neuro-Ophthalmological Service and Training

In most Southeast Asian developing countries, doctors are employed to work 5–6 days per week in the public hospitals and are not well paid. They are required to retire from public work when aged 60 years and so most augment their income by holding additional private clinics after hours. In some countries, it is very expensive to become a specialist, and this may have an impact on the subsequent ability to do “pro bono” work. Public outpatient care is usually free to the patients although they do have to pay for all investigations, medications, and, if surgery is needed, for all consumables (unless they are charity cases). This means that the “barrage” of neuro-ophthalmologic tests, which might be ordered in developed countries is not appropriate. The emphasis must be on clinical skills with minimal use of ancillary testing.

The quality of ophthalmic services in these countries is hampered by a shortage of ophthalmologists, a huge backlog of eye pathology, and a lack of subspecialty training. In addition, there often is little interreferral of difficult cases to those more experienced, meaning that patients may not be able to access appropriate specialist care.

“Learning by rote” is still a common educational method used by many medical faculties in Asia. The Oslerian

sequence of history, examination, provisional diagnosis, focused investigation, final diagnosis, and then treatment plan is not always practiced. Instead, what frequently happens is a brief history followed by a cursory examination (not necessarily of both eyes) and then neuroimaging. Fundus examination at the slitlamp and/or using the indirect or direct ophthalmoscope is not routine. The usual reason given for the cursory nature of the examination is “huge patient numbers, hence limited time available per patient.”

Local Neuro-Ophthalmic Problems

Road trauma from motorbikes is the commonest cause of optic neuropathy and double vision because, in part, wearing of protective helmets is not enforced. Many other optic neuropathies are due to infections or toxic causes. Multiple sclerosis is very rare, as is giant cell arteritis. Thyroid eye disease is common, as are intracranial tumors. Unfortunately, the changing lifestyle and adoption of a more Western diet are generating an increased incidence of diabetes, hypertension, atherosclerosis, and obesity. Cigarette smoking is endemic.

In the 1980s and 1990s, I took part in a number of 3-week visits to provide ophthalmic service and teaching in Melanesia and Micronesia. The Pacific Islands have very small populations scattered on multiple small islands, which can only support general doctors and/or nurse practitioners. It is the bigger nations such as Fiji, the Solomon Islands, and Vanuatu that can support full-time ophthalmologists. Hence, my visits to the small islands involved teaching in general eye surgery with only a small amount of neuro-ophthalmology. Because of local budgetary constraints, rationing of the health dollar was directed at providing benefit to large numbers rather than helping a small number of unfortunate individuals. For example, 1 patient going blind due to a large pituitary tumor and another with antral carcinoma presenting as a lacrimal sac mass were not sent overseas for appropriate treatment because it was considered that the money required was more appropriately spent on malarial control. Table 2 gives reasons why pathology is often so advanced.

Sight for All

Most developing countries in Asia have good ophthalmology training programs, which focus on producing general ophthalmologists adept at cataract surgery and managing