Neurology in India

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Summary

Neurology in India is very different from the speciality practised in this country mainly because of the environment and the many geographical differences in disease-incidence.

Most of the traffic in postgraduate training has been from east to west; perhaps it is time that opportunities arose for this situation to be reversed.

Introduction

India is a large country with an ever-expanding population and despite significant economic advances it must still be regarded as underdeveloped. The western neurologist when visiting such an environment dominated by poverty, malnutrition and infectious disease may well wonder whether his specialty is superfluous in the face of more basic problems. I know from my own experience that this can be a genuine feeling although probably an unproductive one. The policy of scientific advance on a broad front needs courage in such a situation. In this article I record a few personal impressions concerning the practice of neurology in India and hope to stimulate the interest of trainee neurologists in this country to travel and see neurology in an environment so different from our own.

The clinical scene

Patients may travel hundreds of miles for an outpatient neurology opinion and the clinic usually has patients speaking a number of Indian languages. This presents problems to many Indian as well as non-Indian doctors and one may have unsatisfactory direct access to the patient for a history. History-taking can be difficult at the best of times and the average Indian patient is a poor historian, sometimes intentionally so. As would be expected, patients tend to present with well advanced disease and physical signs are marked. For instance, a significant proportion of patients with cerebral tumours are already blind from consecutive optic atrophy following

papilloedema. Until this is remedied the results of tumour surgery will be disappointing. The reasons for this situation are the failure of patients to seek early medical advice, and the paucity of suitable diagnostic centres. Patients have frequently attended other hospitals for treatment prior to their arrival at the neurology clinic.

Although the investigation of patients followed orthodox lines one notable difference was the performance of large numbers of outpatient lumbar punctures. Most British neurologists do not adopt this approach to investigation, perhaps because they feel that any patient who requires a lumbar puncture also requires admission. This is certainly not practicable in an Indian environment, and I observed no serious sequelae from outpatient lumbar punctures; lumbar puncture headache appeared no more common than in inpatients. Perhaps in Britain we should do far more lumbar punctures in the outpatient clinic; for example some cases with disseminated sclerosis would not then require admission.

Another problem that interested me was the difficulty in communicating the nature of various neurological investigations to the uneducated patient. In this country we attempt to discuss investigations such as arteriography with the patient. In India, because many patients come from a simple Indian village background, there is a tendency either not to explain procedures adequately or to find it impossible to do so. Naturally in the right circumstances investigations which are for the patient's good should be carried out, but this type of situation can be misused for research purposes. The educated few have a tremendous ethical responsibility towards their less privileged patients.

Although many of the diseases one sees are similar to those in the west there are striking differences. Tuberculosis of the nervous system still dominates much of clinical neurology. One short ward round was sufficient to surpass my total experience of the neurological manifestations of tuberculosis. Tuberculous meningitis, tuberculomas of the brain and Pott's paraplegia are of course common; a chronic tuberculous arachnoiditis causing a mixed spinal

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cord and root syndrome or multiple cranial nerve palsies is an interesting and initially puzzling disorder. The neurological complications of leprosy, parasitic disorders and virus infections also play an important part in everyday neurology. Problems such as the effects of a monkey-bite on a child's skull and the picture of a man with cysticercosis and generalised pseudo-hypertrophy of muscles due to cysticercal invasion make one realize how different medical practice can be in various parts of the world.

Geographical differences in disease-incidence occur within India itself and a good example of this is fluorosis which is common in the Punjab. Apart from the rarity of disseminated sclerosis in India a very striking finding is the rarity of subarachnoid haemorrhage from a ruptured berry aneurysm. The reasons for this are unknown but it cannot be attributed to the failure of patients to reach hospital; perhaps a genetic factor is involved. Mental retardation appeared to be relatively common, and in many instances this may be due to the high proportion of close-relative marriages.

Patient management and rehabilitation

The management, aftercare and rehabilitation of patients can be frustrating and disappointing. Relatives may remove a patient from hospital before treatment has been completed with disastrous consequences in diseases like tuberculosis. Fear and ignorance frequently have to be overcome in persuading a patient that an operation is the right procedure; this may result in the patient taking his discharge and returning when it is too late to help

him. Even if a great deal of trouble has been taken to rehabilitate a patient with a chronic neurological disorder the result may be disappointing when he returns to his village. There is nothing in common between the modern rehabilitation unit and the Indian village and what is so carefully achieved in the one may be rapidly lost in the other. In the face of this kind of problem one realizes that although medicine advances on a broad front, progress can be severely limited unless there are equivalent social and economic advances.

Postgraduate training

It is now possible to obtain postgraduate training in neurology in India. Madras University offers an in-service training course leading to a D.M.(Neurol.) degree. Before starting training in neurology a doctor must have passed the M.D. degree in general medicine or have an equivalent qualification. There can be little doubt that it is better for Indian graduates to receive the bulk of their postgraduate training in their own country, both in general medicine and neurology. The differences in medical and neurological practice are sufficient for an Indian to be at a disadvantage if he has received all his postgraduate training in the west. The existence of postgraduate degrees in the various specialties is of dubious value. The effort required to take an examination such as the M.D. in general medicine of an Indian university is sufficient; the further stress involved in preparing for a similar type of specialty examination restricts rather than helps training and delays the realization of one's full potential.