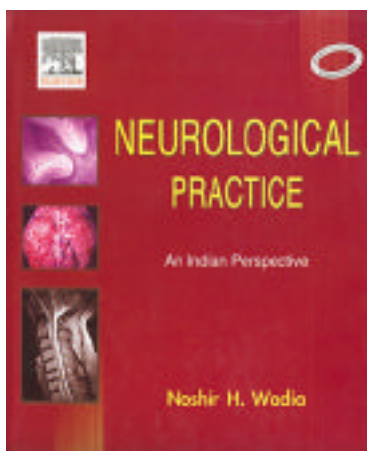


## NEUROLOGICAL PRACTICE - AN INDIAN PERSPECTIVE

BY NOSHIR H. WADIA

Reviewed by Aziz B. Sonawalla



Author: Noshir H. Wadia

Hardback: 737 pages

Publisher: Elsevier

Edition: 2005

ISBN: 8181475496

It is common knowledge that patterns of diseases may vary considerably from country to country and from region to region. Neurology is no exception. However, there is a paucity of systematic literature on neurological conditions prevalent in South Asia, especially in the form of textbooks. A student of neurology has to be content to learn from facts mentioned in Western textbooks, and from what his seniors describe they have learnt 'in their experience.'

It is here that the book Neurological practice - an Indian perspective attempts to fill a long felt need of local literature and experiences. Though written from experiences in India, the similarities in cases and diseases bear marked resemblance to what is seen in Pakistan, and the reader is likely to benefit tremendously from its contents. It is authored by Dr. Noshir H. Wadia, one of the most respected and towering personalities of neurology in India. Dr. Wadia is no stranger to Pakistan, having visited the country on a number of occasions, and making presentations in neurology updates on at least a couple of occasions at different medical colleges in Karachi in the past.

The book has contributions entirely from Indian authors who have been considered as experts in their own chosen fields in neurology. There are 32 chapters under 10 sections, namely infections, epilepsy, vascular diseases, movement disorders, degenerative diseases, CNS myelin disorders, environmental diseases, nutritional deficiencies, diseases of the spinal cord, peripheral nerves and muscles, and finally a section containing chapters on pediatric neurology and imaging of the central nervous system. Dr. Wadia has made a considerable contribution, having authored or co-authored at least fifteen chapters.

Unlike most books, where the introductory chapter provides only a brief outline of the pattern of contents inside, the introduction in this book is a must-read. It is 20 pages long, and it effectively summarizes the gist of the main neurological conditions that are different from what is reported from mainly the Western literature. This makes the subsequent chapters a more interesting read.

As would be expected, infections stand out as an important factor affecting the nervous system. The section on infections spans almost a third of the book, and is divided into viral, bacterial, parasitic and prion infections. The chapter on viral infections discusses in detail the manifestations of poliomyelitis, subacute sclerosing panencephalitis, rabies and Japanese B encephalitis, besides the common ones such as Herpes simplex encephalitis. A separate chapter is devoted to the neurological manifestations of HIV infection and its complications, signifying its increasing importance in this region. The discussion on Kyasnur forest disease is interesting, since it is not mentioned in any other literature. By far the most interesting chapter is on enterovirus 70 and its neurological manifestations. It leads to an ascending type of paralysis; however, it is an anterior horn cell disorder with a much poorer outcome. Credit goes to Dr. Wadia for being the first worldwide to recognize the clinical features as being a post viral manifestation of enterovirus 70 in 1971.

The chapter 'Neuropathy of Leprosy' is very informative. It would be difficult to find such a lucid and detailed description anywhere else.

Similarly, the chapter on neurotuberculosis is informative, and the descriptions are in line with what is encountered in Pakistan and other Third World Countries. The reader in Pakistan will find the chapter on neurocysticercosis interesting, as despite seen so rarely in Pakistan, it is quite common a condition in India. I found the work on Creutzfeldt-Jakob disease (CJD) and the transmissible spongiform encephalopathies an eye-opener. About 78 cases of CJD were detected following the establishment of a national registry in India in 1988-89. This proves that CJD exists in the subcontinent. A similar effort in Pakistan could be equally informative.

The sections on epilepsy and cerebrovascular diseases are noteworthy for the many epidemiological studies that have been carried out in this field. An interesting syndrome described is hot water epilepsy, a form of reflex epilepsy that is not commonly reported from other parts of the world. A higher incidence of young strokes highlights a problem seen in Pakistan too. A whole chapter is devoted to cortical venous thrombosis, highlighting its importance.

The section on degenerative diseases starts with dementias, including Alzheimer's disease. Epidemiological observations suggest what is now becoming apparent - that, with an improved life span, Alzheimer's and other dementias can no longer be dismissed off as an infrequent occurrence, and are likely to become a major public health problem in the future. Another interesting observation is a study from Kerala showing that the incidence of vascular dementia was more than Alzheimer's. This, again, is in line with the clinical observations in Pakistan, although no study has been carried out here to substantiate the same.

Subsequent discussions on ataxias, leukodystrophies and anterior horn cell disorders introduce the reader to many disorders that have not been described adequately in the Western literature. The hereditary ataxias with slow eye movements were first described by Wadia and Swami in the 1960s, and seem to be a predominant form of ataxia in India. The description of megalencephalic leukodystrophy by Singhal et al in the Agarwal community has been attributed to a mutation in the MLC1 gene. The unique clinical and radiological features are noteworthy. The clinical and epidemiological description of motor neuron disease with bilateral sensorineural deafness (Madras motor neuron disease) makes informative reading as does the collection of cases of monomelic amyotrophy.

The section on environment and the nervous system is also very informative, for it deals with topics not adequately covered in the standard neurology textbooks, and is especially pertinent as they relate to topics in relation to the local environment. Thus, snakebites, their

clinical features and management are dealt with in a separate chapter, along with scorpion stings and fish poisoning. Lathyrism, whilst no longer a public health problem, makes very interesting reading, leading as it does to pure motor weakness of the upper motor neuron type. Similarly, the detailed descriptions of fluorosis and triorthocresyl phosphate poisoning are informative, and would not be found in most neurology textbooks.

Nutritional deficiencies are dealt with in a separate section, and include the effects of protein energy malnutrition (PEM) on the nervous system. This should be another interesting chapter, especially for the pediatric neurologist.

The chapter on congenital atlanto-axial dislocation makes fascinating reading, and should interest neurologists and neurosurgeons alike. The chapter on non-compressive myelopathies should form an interesting reference base for the neurologist in Pakistan, since the conditions and causes listed are very much in line with what is observed here.

Chapters on peripheral neuropathies and myopathies show a similar pattern of occurrence in India as compared to the West. The informative part is contained in the descriptions on tropical pyomyositis, myopathy of parasitic infestations and osteomalacic myopathy, conditions of greater significance in Third World countries. Interestingly, most descriptions are supported by local research and literature. Finally the chapters on pediatric neurology and imaging of CNS infections focus predominantly on conditions prevalent in the subcontinent, and should provide useful material to the pediatric neurologist and neuroradiologist.

In conclusion, this book is a useful contribution towards the understanding of neurological conditions as they exist in this part of the world. Although most of the conditions are described from the Indian perspective, observations suggest that the disease patterns described there would have a significant relevance to those seen in Pakistan and Bangladesh, along with other Third World countries. It is far from being a complete book on neurology, but it successfully highlights the main areas and diseases where there is a significant difference from the Western literature. This book is likely to be very informative for the neurologist who intends to practice and undertake research in this part of the world. It should certainly be in every medical library in this country.