

TRANSCRANIAL DOPPLER. 1992. Edited by David W. Newell and Rune Aaslid. Published by Raven Press. 277 pages. \$180 Cdn. approx.

Although carotid Doppler techniques have been in clinical practice for over 20 years, and transcranial Doppler (TCD) for 10 years, the method has not become respectable until recently. Unfortunately, the stampede to set up Doppler laboratories in the past few years may prove more detrimental to the credibility of the technique than the previous decades in the wilderness.

The editors of this book on transcranial Doppler (one of whom, Aaslid, invented the technique) have assembled a team of experts in the field to produce what is undoubtedly the best state-of-the-art, readable hand book on this topic. There are chapters on all the major advances in TCD, including the basics of the technique, the rapidly proliferating uses in research in cerebral haemodynamics, and its clinical value. It is written largely by clinicians, mainly practising neurologists or neurosurgeons, and embraces all aspects from subarachnoid haemorrhage, to brain death, as well as a multitude of paediatric disorders.

The style is fairly even, though sometimes the prose is stilted and curious in cases where the authors are not primarily English speaking. Controversial issues are generally treated as such, though the bias of the author shows through, and there is no frank misinformation. A number of issues remain blatantly unanswered. Similar to the situation of carotid endarterectomy (which languished for decades until a decisive study of a small number of patients proved its efficacy) the value of TCD monitoring in carotid surgery remains unsolved. The technique is still widely used as an operative monitoring device, especially in Europe, yet most peri-operative strokes are embolic and not haemodynamic.

It is an expensive book, but is of high quality for a pleasing layout, and there are plenty of clear illustrations which make for easy reading. This book can be read by a wide audience including technicians and those with interest but no knowledge, and for 1992 at least, it remains the best in the field.

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HEADACHE AND DEPRESSION: SEROTONIN PATHWAYS AS A COMMON CLUE. 1991. 1st Edition. Edited by Giuseppe Nappi, Giorgio Bono, Giorgio Sandrini, Emilia Martignoni and Giuseppe Micieli. Published by Raven Press, Ltd., New York. 329 pages. \$143 Cdn. approx.

Headache and depression are among the most common afflictions of mankind. This book tells us that 75% of the general population experience a headache at least once a year, and depression is a common illness for which patients visit their family doctor. Furthermore, it is argued that the two disorders occur in the same individuals more often than would be expected by chance. The hypothesis of the editors is that these two disorders may involve the same neurotransmitters and neuromodulators — serotonin, norepinephrine, dopamine and endorphin — and responsivity to the same drugs such as tricyclic antidepressants and serotonergic agents.

These similarities form the basis for the development of this multi-authored book. The book contains 30 brief articles (10

pages average), written by authors from a variety of departments of neurology, psychiatry and pharmacology, both in Europe and North America. The editors are all from the Headache Centre, Department of Neurology, C. Mondino Foundation, University of Pavia, Italy. Topics addressed include the neurochemistry of 5-hydroxytryptamine pathways, the association of chronic headache with mood disorders, periodicity of affective and cluster headache syndromes, light therapy and fall/winter depressions, the relationship of the menstrual cycle to mood and headache, as well as discussions of the effects of serotonergic drugs on headache and depression.

Unfortunately the quality of discussion, as sometimes occurs in multi-authored books, is uneven. A number of authors present their own research, yet acknowledge the data as the result of only pilot or preliminary studies. The reader is thus left with some question as to the confidence that can be placed in the conclusions. There is significant repetition with, for instance, several chapters reviewing the association of serotonin with depression. Although the editors tell us that headache and depression arise in the same population frequently, the book is lacking in a clear account of the epidemiology of the co-occurrence of these two disorders.

In places the book is unevenly edited. One chapter on the psychodynamics of headache tells the reader, at some length, about the early psychological life of migraine headache patients and tension headache patients and how they differ. Yet no account is provided of the research methods used to form these conclusions. This reader would have preferred some discussion of methodology as assurance that reasonable experimental protocols (blinding of investigators, systematic interviewing techniques, etc.) were followed.

Unfortunately, I cannot recommend this book to either the clinician or investigator. The former will look in vain for a clearly enunciated diagnostic and therapeutic approach to these patients. The latter will find that the book quickly dates as many of the studies are completed and published in final form elsewhere.

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TEXTBOOK OF CLINICAL NEUROPHARMACOLOGY AND THERAPEUTICS. 1992. 2nd Edition. Edited by H.L. Klawans, C.G. Goetz and C.M. Tanner. Published by Raven Press, New York. 666 pages. \$120 Cdn.

This is the second edition of a textbook which began life as the work of four authors in a single university neurology department, and which has become a multi-authored compilation of information about neurological therapeutics. Psychopharmacology is excluded, but most other types of disease likely to be encountered by neurologists are covered, including infectious diseases.

Two opening chapters discuss pharmacokinetics, pharmacodynamics, and synaptic transmission in general terms. The material about pharmacokinetics is similar in content and depth to what is found in most standard pharmacology textbooks, whereas the information about synaptic function is more specifically related to neuropharmacology. The remaining 46 chapters consider individual diseases or syndromes.

In general, clinical description, pathophysiology and therapeutics are appropriately balanced. The emphasis on neuropharmacology is variable from chapter to chapter. Some chapters, such as those about parkinsonism (C.G. Goetz) and spasticity (R.A. Davidoff), integrate neurochemistry, pharmacology, and the practical use of drugs very well indeed. However, in places the content is more suitable for a general textbook of neurology, rather than one concerned with neuropharmacology and therapeutics. For example, the clinical syndromes caused by heavy metal intoxication are surveyed but little is said about treatment (chelating agents are discussed in another chapter). Likewise, the chapters about cerebrovascular disease and raised intracranial pressure could be shortened considerably if more specifically focussed on therapeutics.

Several contributions are first rate, such as J.E. Riggs's discussion of the classification, treatment and prophylaxis of periodic paralysis. Four chapters about mechanisms of action and use of anticonvulsants (T.P. Beck, M.C. Smith and H.L. Klawans) are a good distillation of experimental data, literature review, and the authors's personal approaches. Similarly, G.H. Fromm nicely combines the theoretical and practical in his discussion of trigeminal neuralgia, although not all readers will agree with Fromm's view that baclofen is the drug of first choice in this disorder. Some chapters contain references up to 1991 (for example, the interim results of the European and North American carotid endarterectomy trials are described), but readers seeking information about sumatriptan for migraine or intravenous immunoglobulin in inflammatory neuropathies will need to look elsewhere. Neurological pain syndromes other than headache (such as painful peripheral neuropathies) are not considered in any detail, and would have been welcome.

Overall, I found *Clinical Neuropharmacology and Therapeutics* to be a generally reliable and worthwhile reference book, with several outstanding contributions. The book's main weakness is a lack of focus in several chapters, making it unnecessarily long. Clinical neurologists and neurology trainees will likely find it to be a source of useful subject reviews and of help when dealing with infrequently encountered clinical problems.

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EPILEPSY SURGERY. 1992. First Edition. Edited by Hans, Otto, Luders. Published by Raven Press, New York. 854 pages. \$143 Cdn.

This large textbook is the published result of the Second International Cleveland Clinic Epilepsy Symposium held in June, 1990. There are one hundred and fifty-five contributing authors. The book is designed to give any overview of epilepsy surgery and present recent advances in the field. It succeeds remarkably well.

I have used the book as a reference source for specific problems and have found a balanced discussion and a good reference list leading through the literature on each occasion. The text has something to offer virtually anyone involved in a clinical epilepsy surgery program. The chapters on General Overview "Conceptual Considerations", Medical Intractability and those discussing Epileptic Syndromes would be valuable reading for anyone in neurology or neurosurgery and can be highly recommended for trainees.

The sections on design of an interpretative epilepsy monitoring unit, EEG evaluation and magneto-encephalography could also be recommended for those in the EEG lab and the nursing and other staff involved with the patients.

The chapters on surgical techniques and complications are good, particularly the "Anatomic Considerations in Temporal Lobe Surgery". A wider range of information about different surgical techniques for temporal lobe resection could have been presented, however, this information is reasonably readily accessible elsewhere.

The chapters on surgical pathology and surgical specimen research are appreciated as they help to bring information in this rapidly evolving area into context.

I believe that no matter what one's involvement with the surgery for epilepsy, this will provide a very useful reference. Despite its price, it provides very good value and should be widely used.

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IDIOSYNCRATIC REACTIONS TO VALPROATE. 1991. Edited by Rene H. Levy and J. Kiffin Penry. Published by Raven Press, New York. 165 pages. Price not available.

This soft cover monograph reviews the current state of knowledge concerning the idiosyncratic reactions to valproic acid therapy. It addresses in large part the hepatic toxicity of valproate. It is divided into 23 chapters and is multi-authored.

The monograph addresses the clinical and the biochemical features of valproate toxicity both in children and adults. There are contributions by 56 authors, both clinicians and basic scientists, from the United States, Canada and Europe.

The clinical chapters describe the clinical significance of valproate toxicity, its clinical manifestations, the age related incidence of hepatic toxicity, and the management of valproate related hepatic toxicity. Other chapters describe the drug induced liver pathology and the biochemical abnormalities and the disturbances of mitochondrial metabolism that are complicated in the hepatic toxicity of valproate. The role of free radical scavenger deficiency in valproate toxicity is discussed. Chapters on medium-chain acyl-CoA Dehydrogenase deficiency, disorders on the urea cycle, and organic acidemias are included.

The larger part of the monograph is devoted to the biochemistry of valproate hepatic toxicity. The clinical sections are brief.

The monograph should be of interest to both clinicians and basic scientists who are interested in the mechanisms and biochemical abnormalities of valproate toxicity. More complete clinical summaries can be found elsewhere. The monograph should be of interest to both adult and pediatric neurologists who treat patients with epilepsy. Despite the monograph being multi-authored the various chapters have been well edited and the style has been kept uniform throughout. The monograph is well referenced and could serve as a reference text on the clinical aspects of valproate toxicity and the proposed mechanisms.

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