

treatment of acoustic neuromas. Radiosurgery is effective in controlling the growth in most tumors, and avoiding procedure related cranial nerve injuries. Alternatively, excellent patient outcomes may be achieved with microsurgical resection, when performed by expert surgeons. In this text, neurosurgeons Wolfgang Koos and Christian Matula, together with anatomist Johannes Lang have provided a comprehensive review and guide to diagnosis and microsurgical resection of acoustic neuromas by the retrosigmoid-transmeatal approach. The authors have produced a high quality atlas that will be valued by neurosurgeons who treat these lesions. The text was completed after the death of the senior author, Professor Koos, and serves as a fitting honour to his contributions and expertise.

The atlas text is concise and well-written, generously illustrated with operative photographs, line drawings and coloured diagrams. The eleven chapters are well-organized, followed by an extensive bibliography and practical subject index. Following a brief introduction, Chapter 2 clearly depicts microsurgical anatomy of the cerebellopontine angle and associated structures, with a series of high quality photographs and complimentary labeled line drawings. Junior and expert surgeons alike will appreciate the logical sequence of images.

The next two chapters cover topics of diagnosis, decision-making algorithms, operative set-up, patient positioning, neuroanesthesia and intraoperative monitoring. The authors have a clearly stated preference in management of acoustic neuromas, a retrosigmoid transmeatal approach in the sitting position that is supported by their exemplary results summarized in Chapter 11.

Chapter 5 comprises the bulk of the text, where 64 individual cases illustrate surgical resection of acoustic neuromas ranging from small intracanalicular to expansive grade 4 tumors. The comprehensive collection of surgical cases is well-illustrated with intraoperative photographs, relevant captions and highly understandable line drawings. Surgeons will appreciate the quality of these illustrations, and the skillful surgical technique that is clearly depicted.

Chapters 6 and 7 similarly illustrate surgical resection of other cerebellopontine angle tumors involving trigeminal, facial and glossopharyngeal nerves as well as meningiomas, epidermoid tumors, choroids plexus papillomas and arachnoid cysts.

Chapters 8, 9 and 10 are brief and introduce the readers to 7th nerve reconstruction, intraoperative endoscopic assistance, and gamma knife radiosurgery.

This atlas is an excellent reference and learning aid for those operating in the cerebellopontine angle. The techniques illustrated exemplify the potential to achieve excellent patient outcomes with microsurgical resection of acoustic neuromas. The authors have admirably succeeded in producing an outstanding reference, and a truly worthwhile addition to individual and departmental neurosurgery libraries.

*Olawale A.R. Sulaiman, Anthony M. Kaufmann
Winnipeg, Manitoba*

HANDBOOK OF NEUROTOXICOLOGY, VOLUMES 1 AND 2. 2001 and 2002. Edited by Edward J. Massaro. Published by The Humana Press. 668 and 594 pages. C\$270 and C\$190 approx.

The "Handbook of Neurotoxicology" reviewed here is a two-

volume work on a broad and rapidly evolving field of research. The book is reportedly aimed at researchers and students, but the title may seem interesting to the practicing clinician as well.

Volume one is divided into four sections comprising 28 chapters by a total of as much as 59 different authors, primarily pharmacologists, toxicologists and biochemists mainly from the United States, but from European countries, Australia and New Zealand as well.

This first volume covers the broad field of pharmacological effects of different neurotoxic agents from pesticides, metals and microbial-derived agents to neurotoxins originating from animals.

Throughout the different chapters, the authors tend to lay more emphasis on biochemical characteristics of the different neurotoxins than on the clinical symptoms resulting from an exposure. Regarding organophosphates, for example, a lot of information is provided on biochemical mechanisms of toxicity, including a perhaps extensively detailed account of current pharmacological research. In contrast to that, the clinical symptoms of an organophosphate intoxication are only rudimentarily described. Likewise, other chapters on snake-derived toxins or the effects of heavy metals on zinc-finger proteins remain on the mainly pharmacological level by giving detailed information on functional significance of structural deviations or binding topographies. An exception may be the interesting chapter by J.B. Harris on phospholipase A2 neurotoxins in snake venoms who succeeds in bridging the gap between toxicology and clinical neurology. As information concerning one specific neurotoxic agent may be spread among several chapters, to gather it in some cases requires time and thorough reading. The usefulness of this volume as a reference book for neurotoxins, therefore, may be limited.

Volume two, like volume one, is written by many different individual authors. It is divided into four sections of 21 chapters altogether. The first section concentrates on the biological effects of human-made toxins on the developing nervous system. It provides a detailed overview of the methodology of developmental neurotoxicology, describing behavioural assessment and other invasive and noninvasive techniques of identifying developmental CNS insult. In addition to that, it summarises the data of current developmental neurotoxicology studies in humans, as well as animal models.

The second section focuses on the neurotoxicity of drugs of abuse. It includes a detailed description of EEG alterations caused by cocaine, of molecular and cellular pathways of methamphetamine-induced neurotoxicity as well as a summary of the current state of research concerning cannabinoid influence on brain reward substrates. While this second section again lays emphasis on basic natural science, the chapter on emerging drugs of abuse like ketamine or gamma-hydroxybutyrate contains valuable information for the clinician on the way these drugs are administered and on the clinical symptoms they induce.

Section three acknowledges the growing importance of structural and functional imaging techniques in neurological scientific research laying emphasis again on the neurotoxicity of drugs of abuse. It provides a good overview of the results of PET, SPECT, fMRI and magnetic resonance spectroscopy studies in investigating morphological and functional alterations in brain caused by drugs like ethanol, opioids or "ecstasy". Section four (again) describes neurobehavioural assessment techniques, showing a certain measure of overlap with the beginning of the first part of this volume.

Both volumes are laid out attractively and include a significant number of reproductions chemical formulas and other photographs. Even though the text sometimes seems a little bit unstructured, and a few more breaks and captions certainly would have improved readability, both volumes are generally well-written and edited, and contain much valuable information on the pharmacological aspects of neurotoxicology, as well as state-of-the-art methodology. In contrast to that, especially in the first volume, there is a certain lack of information regarding the clinical aspects of neurotoxicity. The books may be primarily interesting to scientists with a keen interest in pharmacology and toxicology but may be found less useful by the neurological clinician.

*Albert Ludolph and J. Bretschneider
Ulm, Germany*

TEXTBOOK OF DIABETIC NEUROPATHY. 2003. Edited by Gries FA, Cameron NE, Low PA, Ziegler D. Published by Thieme Medical Publishers. 408 pages. US\$119 approx.

This is an impressive-looking book. It has four distinguished editors with backgrounds in endocrinology, neurology, and basic science. There are contributions from 63 authors from 13 countries, it is extensively referenced, and is handsomely produced. This book is a gold mine of information about the diabetic neuropathies but, as in mining for that precious metal, the digging is hard work.

The title is a bit problematic: it should be "Textbook of Diabetic Neuropathies", not neuropathy. This is not a pedantic quibble. There are a variety of diabetic neuropathies – important clinical syndromes – beyond the well-recognized distal symmetric polyneuropathy (DSP). The clinical features of these syndromes, natural history, attempts at treatment, are somewhat sketchily described. That the pathogenic mechanisms are likely to be different from that of DSP is underemphasized.

A further problem is the unusual organization of the book. It is not until Chapter 5 (page 175) that we encounter a classification of the diabetic neuropathies. It would be very helpful to the reader if this were at the beginning.

A vast amount of highly relevant information is presented, but readers are likely to be frustrated by the paucity of wise and balanced syntheses of disparate information and data. Chapter 4, which deals with the pathogenesis and pathology of diabetic neuropathy, is the most striking example. This core chapter contains scholarly contributions from many researchers representing the different pathogenic camps: vascular/ischemia, toxic/metabolic, immunologic. However, it lacks a balanced synthesis to bring it all together into an intelligible focus for a neurology or endocrinology resident.

Some of the material in this book reads as if it has been reproduced from other sources without being edited for integration into this particular text. Chapter 2 contains information on the central nervous system and some neurological investigations that are largely irrelevant. Many chapters are under-illustrated, some overly so. Important information that warrants integration in main chapters, is relegated to an appendix in what appears to be an afterthought. There is a section in one chapter entitled "Central diabetic neuropathy". This is like reclassifying multiple sclerosis as a peripheral neuropathy that just happens to involve the central nervous system! Chapter 1 is an excellent general discussion on

diabetes mellitus, complete with 11 pages of references. But it is highly unlikely that many readers will read this, given that the focus of the book is that of neuropathies.

Discussions of the all-important topic of drug treatments for diabetic neuropathies are scattered throughout the book. A useful section on evaluating drug effects in disease is relegated to near the end of the book. It would have served as an excellent introduction to a comprehensive discussion on all the treatments for the diabetic neuropathies so far attempted, all leading to a wise summary of the current state of affairs. The important review of the role of glycemic control on the development and/or the progression of neuropathy is buried in the pathogenesis chapter, rather than in a treatment chapter; and there are no citations to DCCT or UKPDS in the Index to help one to find this information. Similarly the discussion on aldose reductase inhibitors is in the pathogenesis chapter.

In short, this book contains most of the information that one needs to know or wants to find out about diabetic neuropathies, but mining for these numerous gold nuggets is hard work due to the awkward layout of the material and the shortage of summaries at the end of sections or chapters.

*John D. Stewart
Montreal, Quebec*

WEINER AND LEVITT'S PEDIATRIC NEUROLOGY. 2003. 4th Edition. Edited by Michael E. Cohen, Patricia K. Duffner. Published by Lippincott, Williams, and Wilkins. 346 pages. C\$41 approx.

This is the latest edition of the only widely-published pocket reference in pediatric neurology. Edited by two experienced pediatric neurologists, it is a valuable tool for multiple varieties of trainees working in the field. The most important credential of such a publication is that it meets the educational needs of the audience for which it is intended. The primary target in this case appears to be the pediatrics resident rotating through child neurology. A well-structured pocket reference can be invaluable to such an individual, particularly in neurology, as many pediatric trainees are intimidated and have a lower "level of comfort" with neurological illnesses in children. Adult neurology residents would appreciate information on pediatric-specific areas of neurology while other residents, medical students, and junior pediatric neurology residents may also find value in this book.

A junior pediatric resident anticipates their first day on pediatric neurology with great trepidation. They imagine two dreaded situations from which a well-written, pocket sized reference might be able to rescue them. The first is being asked to see a child with presenting complaint "x" such as headache, weakness, or seizure. Their need is an approach to, and differential diagnosis of, the problem. The second situation is being asked to assess a child with condition "y" such as spinal muscular atrophy or Lennox-Gastaut syndrome. Having never even heard of some of these, this resident needs to quickly familiarize themselves with the essential details of the condition. Combining these two needs into a single publication is a difficult task. However, with a few caveats, Drs. Cohen and Duffner have done an admirable job in accomplishing this.

The largest shortcoming of this publication is its overall organization. While most individual topics are well-presented, chapter arrangement appears essentially random. For our resident seeking a differential diagnosis to a problem, this disorganization is