

symptomatic and asymptomatic disease, taking into account not only the severity of stenosis but other factors including plaque morphology, contralateral disease, disease presentation and certain patient variables, and presented along with some clearly developed treatment guidelines, would have been useful. This section also contains chapters on medical therapy, cardiac disease and carotid surgery, internal carotid “tandem lesions” (which unfortunately does not include the recent NASCET publication on this subject by Kappelle et al), an excellent chapter on the visual system and carotid disease, and another on the timing of surgery following a recent stroke.

The next and longest section is on anaesthetic and surgical techniques, and it consists of 16 chapters covering every aspect of the procedure you could imagine. The technique of carotid endarterectomy is the topic of three separate chapters and irresistibly slipped into three others on different subjects, each author with their own preferences, but as the editors argue in the preface this kind of repetition is unavoidable in a multi-authored text and can even be considered valuable. This section is a resource for rarer problems affecting the carotid artery, such as nonatherosclerotic narrowing, tumors, and trauma.

The next section on “Perioperative Monitoring and Management” deals at length with the shunt controversy. There are succinct chapters on the different intraoperative monitoring modalities available, and ischemic, hemodynamic, cardiac and wound complications are covered. The management of postoperative stroke and neck hematoma is too briefly discussed given their relative importance. For example, the former is not divided into deficits upon awakening versus those that are delayed in onset, the two having clearly different implications with respect to etiology, investigation and management. The value of cranial CT as a first investigation for all deficits regardless of timing, as recommended, is questionable given that hemorrhage is a rare cause of postoperative stroke, and that valuable time may be lost in its performance. The management of neck hematoma receives less than a paragraph, despite it being a life threatening situation on occasion.

Sections five and six cover postoperative care and the future of carotid endarterectomy, and includes an up-to-date chapter on carotid angioplasty and stenting, the next challenge carotid endarterectomy must face. There is also a chapter on outcome analysis, a very important topic since the indications learned from the trials can only be applied to appropriately chosen patients when the local risk of the procedure is demonstrated to be acceptable, a delicate issue when one starts considering institutional audits.

This book, with both a neurosurgeon and vascular surgeon editor, has an authorship that is well-balanced between the two specialties. It is large and comprehensive, well-indexed, and the paper and figures are of good quality making its price justifiable (although make sure the missing pages are included in your edition!). It is a good reference for surgical libraries, but I suspect has too little to offer the already experienced carotid surgeon to justify inclusion in his or her own personal library. In the interest of time and savings, surgical trainees are probably better off consulting more condensed versions of the same information available in general, multi-topic neurosurgical texts, as well as numerous recent articles and monographs on the subject.

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EPILEPSY: PROBLEM SOLVING IN CLINICAL PRACTICE. 1999. Edited by Dieter Schmidt, Steven C. Schachter. Published by Martin Dunitz. 489 pages. C\$141.85 approx.

The editors, Dr. Schmidt (Berlin) and Dr. Schachter (Boston) acknowledge that, in recent years there have been remarkable achievements in the understanding of clinical epilepsy and the introduction of new options for the treatment of seizures. These developments have been well-documented in recently published, comprehensive textbooks of epilepsy.

The purpose of this book, as stated, is to identify and help to resolve the many remaining and often complex clinical problems in the treatment of epilepsy for which there are no easy answers and which continue to puzzle clinicians and generate significant controversy in the literature and the lecture hall.

Multiple worldwide authorities have contributed to detailed and practical considerations pertaining to the management of a variety of clinical issues that continue to challenge neurologists and epileptologists.

The extensive text of 489 pages is divided into Diagnostic Issues and Therapeutic Challenges.

The Diagnostic Issues include discussions on the differential diagnosis of epilepsy; age-related diagnostic issues; the role of diagnostic tests in clinical epilepsy; identifying candidates for surgery, and diagnosis of associated behavioural disabilities. Within these categories are discussions related to seizures developing during sleep, seizures and syncope, the diagnosis of non-epileptic seizures, the diagnosis and treatment of seizures in the elderly, the rational diagnosis of genetic epilepsies, psychiatric issues, and many other relevant topics.

The second half of the book, which is devoted to Therapeutic Challenges, includes discussions on the initiation, and termination of treatment; refractory epilepsies; childhood epilepsy; prognosis in epilepsy; and treatment of epilepsy. Within these topics are discussions related to starting and stopping anti-epileptic drugs, over-treatment of epilepsy, pregnancy and epilepsy, cognitive deficits in epilepsy, common treatment errors, ketogenic diet, long-term prognosis, predicting surgical outcome in epilepsy, and a team approach to treating epilepsy.

In essence, the primary benefit that is derived from this compendium is the logical and practical resolution that is provided for many of the common and often difficult problems encountered by neurologists, neurosurgeons, and psychiatric practitioners who are dealing with clinical problems related to epilepsy. The authors indicate that this book is not meant to be a complete textbook of epilepsy but, rather, a practical guide to many epilepsy-related problems based on extensive, authoritative clinical experience. In this role, it succeeds admirably. In addition, comprehensive references support the recommendations of the editors and contributors.

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TEACHING ATLAS OF BRAIN IMAGING. By Nancy J Fischbein, William P. Dillon, A. James Barkovich. Published by Thieme. C\$180.60 approx.

This atlas is a compendium of 167 cases each representing a different disorder in which the intra-cranial contents are affected. In

the preface, the authors state that the atlas would be most useful as a review to senior residents studying for the Radiology Boards, as well as neuroradiology fellows or practitioners preparing for the CAQ examination. My experience with the atlas strongly supports this contention as it is one of the best texts I have ever seen for this purpose. The cases are collected from the "Unknown Case Conference" that occurs within the Neuroradiology Section on a weekly basis at the University of California at San Francisco. They are therefore susceptible to colloquial dogma, however, any such influence is quite subtle and widely accepted neuroradiological principles are upheld – no surprises here! The cases chosen for inclusion have been carefully selected and are excellent representations of the various disease processes that can affect the brain, meninges, and cranial nerves. Classic findings specific to each disease are demonstrated usually with modern images of very high quality. Each case is presented in a standard format that begins with the clinical presentation accompanied by the relevant images. This is followed by description of the radiological findings, the diagnosis, the differential diagnosis, and the discussion. The concise discussion is divided into the following subheadings: background, clinical findings, pathology (gross and microscopic), CT imaging findings, MR imaging findings, treatment and finally prognosis. At the end of the case, a reference of suggested up-to-date readings is provided. **Highlighted in the margins of each case is a section describing pearls and pitfalls that are especially useful in informing the reader of specific clues and potential traps that help to sharpen the reader's overall diagnostic acumen. Complimenting each case is a set of additional images taken from other patients with the same disorder, permitting the reader to gain a flavor of the diversity of imaging findings that may be present.** Overall, the quality and range of cases is excellent. Imaging findings stay true to the classical patterns of disease. The coverage is comprehensive providing an excellent review for a board or CAQ examination. A bulleted format is used within the subheadings that permits rapid acquisition of information decreasing the fatigue usually associated with identification of relevant information within conventional full sentence text. It is a very pleasing format for presenting the information permitting fast learning. The only negative feature, if one intends to use this text as a test of diagnostic ability (i.e. true board style testing format), is that the cases, even though they are presented as unknowns, are somewhat predictable because of their grouping into specific disease categories. Random sequencing of the cases would have alleviated this problem but organization of the text would have suffered. Nevertheless, this atlas provides a comprehensive and rapid method for reviewing non-spinal CNS disorders. I would strongly recommend it as a primary tool for Neuroradiological review. The authors and the publisher Thieme have created a web site where an additional 29 cases (to date) have been made available for review following the same format as the text. I would suggest that anyone interested in purchasing the text access this well-designed web site (www.thieme.com) to obtain their own impressions of this work.

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NEURAL TRANSPLANTATION METHODS. 1999. Edited by Stephen B. Dunnett, Alan A. Boulton, Glen B. Baker. Published by Humana Press. 576 pages. C\$185.00 approx.

The first efforts in the field of neural transplantation date back to

over a century ago. There has been a relative hiatus for seven or eight decades with a more recent rediscovery and a flurry of activity in this field in the last 20-30 years. We have now seen the transition from laboratory animal experiments to the application of **transplantation to treat human disease. This history has been spotted by initial exuberant enthusiasm leading to the clinical use of transplants, perhaps before some of the fundamental details had been worked out. There is now a more careful rational approach with stronger scientific underpinnings and better clinical designs** so that we are now in a position to make significant advances in this field.

The last decade has found tremendous advances in transplantation biology with important discoveries of the potential of stem cells that are resident in the adult nervous system and with increasing advances in the manipulation of genetic information in cells. There is an increasing number of potential sources for transplant material into the brain and the field has expanded to involve not only transplantation of neurons but also of **non-neuronal cells, for example, myelogenic cells to remyelinate the diseased nervous system and the use of non-neuronal cells with genetically modified non-neuronal cells to deliver biological molecules.**

The book edited by Dunnett, Boulton and Baker is divided into three areas. (1) The sources of cells for transplantation (2) The methods of implantation and (3) Factors in graft survival and function.

The emphasis is on technical aspects of transplantation procedures and the scientific basis for choosing one method and one strategy over another. The sources of transplants discussed include embryonic neural tissue, neural stem cells, immortal life cells, cells from engineered cells and cells from the testes. It does not cover certain other types of cell transplants that have been used, for example, there is no mention of placental cells or carotid body cells that have recently been shown to provide some interesting biological effects on experimental animal models of parkinsonism. The methods of implantation include details of tissue preparation and storage, of the dissociation of microinjection and the book has a summary of the application of polymer encapsulated cells for the treatment of various CNS diseases. Strategies to enhance graft survival and incorporation and immunological considerations particularly with xenographs are covered.

This book provides an excellent overview for scientists who are involved in the field of neural transplantation and its various emerging applications to treat neurodegenerative diseases and demyelinating disorders. Because of its emphasis on methods of neural transplantation rather than on the design of clinical trials it will be of use to basic scientists and those clinicians involved in transplantation programs either in a laboratory setting or in a clinical research trial setting.

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DISORDERS OF BRAIN AND MIND. 1998. Edited by Maria A. Ron and Anthony S. David. Published by Cambridge University Press. 373 pages. C\$62.93 approx.

This splendid book contains contributions of leading international authorities from major academic centres in the United Kingdom and the United States. Each of the seven sections consists of two papers and these include: the neuropsychology of the frontal lobes and structural abnormalities in schizophrenia; the