

Book Reviews

THE AXON, STRUCTURE, FUNCTION AND PATHOPHYSIOLOGY. 1995. Edited by Stephen G. Waxman, Jeffery D. Kocsis and Peter K. Stys. Published by Oxford University Press. 692 pages. \$C251.00

This multi-authored text by Waxman, Kocsis and Stys is a very nice compendium of current information about axonal histological structure, physiology and pathophysiology. There is an "all star" cast of authors. Particularly enjoyable chapters were those by Mark Bisby on Regeneration in the Peripheral Nervous System, Abnormal Excitability in Injured Axons by Marshall Devor and Axonal Degeneration and Disorders of the Axonal Cytoskeleton by John Griffin and group. The chapter on voltage-gated ion channels and axons by Steven Waxman is clear, concise, well illustrated and up-to-date. The chapter on pathology of the myelin sheath by Sam Ludwin is very nicely illustrated with EM photographs. All of the chapters have superb reference lists allowing the readers to pursue further information on specific items. This would not be a book to specifically address clinical aspects of axonal disease per se. Although pathophysiology is beautifully discussed in the various chapters and there are chapters on clinical electrophysiology in human peripheral nerve disease, these are really short summary chapters of previous work by these authors and would be only of limited use. For example, the chapters by Burger and Schaumburg on peripheral neuropathy is not at all a substitute for a more in depth clinical text. Ian McDonald's chapter on MS is also fairly limited in the information presented and wouldn't really be helpful for those seeking specific clinical information. On the other hand the basic science chapters are much more comprehensive and rounded.

This text could serve as a useful exam preparation for neuroscience residents that are interested in specific topics. It could also be used as a background summary addressing research questions in specific areas, e.g., regeneration following which one might pursue specific issues addressed.

Overall the text is a worthwhile investment for those interested in peripheral nerve disease and physiology but should not be considered as a reference on clinical disease. Waxman and colleagues are also to be congratulated on putting together information from different disciplines as they apply to axonal disease: neurobiology, physiology, pathology and clinical medicine.

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NEUROCRITICAL CARE. 1994. Edited by Werner Hacke. Published by Springer-Verlag. 1044 pages. \$C143.00

In the foreword the editor states that the aim of this book is "to give practical, unbiased, and easy-to-read information to neurologists and other specialists encountering problems of critically ill patients with neurological diseases." Certainly the book succeeds in giving practical, unbiased, and easy-to-read information. Tables and illustrations are used liberally and appropriately throughout the text. The book does however have a number of significant flaws. Chief among these is the fact that although the book is entitled "Neurocritical Care", it is really a textbook of acute general neurology with an emphasis on critical care. Significant portions of the book are taken up with descriptions of disease entities that have no

(monocular blindness) or only the most tenuous connections (neurosyphilis) to neurocritical care. As a result, presumably in an effort to keep the book to a reasonable length and cost, the management of disease entities that constitute the bread and butter of neurocritical care (e.g., ischemic stroke, intracerebral hemorrhage, head injury, subarachnoid hemorrhage, Guillain-Barre Syndrome) are often given a more superficial treatment than would be expected in a book with this title.

The book is multi-authored and the chapters accordingly vary in quality, although all cover the basics of the diseases under discussion quite adequately. The chapters on general monitoring, nutrition, and respiratory management are excellent for the neurologist/neurosurgeon who is unfamiliar with general critical care medicine. There are a couple of significant omissions. There are no chapters devoted to the role of neuro-imaging and interventional neuroradiology in neurocritical care, although liberal references to the former are used in chapters on individual diseases. There is a very comprehensive chapter on transcranial doppler monitoring but little or no discussion on other techniques of measuring cerebral blood flow and metabolism (e.g., cold xenon Ct scanning, jugular O₂ saturation measurement). The chapter on the clinical neurological examination is so superficial as to be useless to practicing neurologists, neurosurgeons, or trainees.

The text reads well for the most part, although there are occasional awkward translations from German to English and rare typographical errors. References are neither numbered nor cited in the text and therefore it is difficult to attribute particular statements or concepts to the references at the end of the chapters. This was done purposefully to maintain readability. Superscript numbered references would be a reasonable compromise between readability and convenience in looking up references.

In my view the book would be strengthened by jettisoning the large number of chapters devoted to general neurology, all of which are covered far better in standard textbooks of neurology and neurosurgery, and concentration on those diseases, diagnostic, monitoring and management modalities that are specific to neurocritical care. As it stands, the reader will find much useful information about neurocritical care in this book, but will have to wade through a fair amount of non-essential information to find it.

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INFANTILE SPASMS AND WEST SYNDROME. 1994. Edited by Olivier Dulac, Harry T. Chugani and Bernardo Dalla Bernardina. Published by Cambridge University Press. 310 pages. \$C52.00

This book provides a detailed, current overview of infantile spasms and West syndrome by leading authorities. Following a workshop on infantile spasms held at Abbaye de Royaumont, France, in 1991, the authors reached agreement on a common terminology, described in the first chapter. The book is in five sections and includes chapters on a) the basic mechanisms and epidemiology; b) seizure types, ictal and interictal EEG characteristics, cognitive features and differential diagnosis; c) the neuropathologic and neuroimaging features, which have changed considerably our understanding of this condition. The fourth section includes chapters on the influence of each major etiology on the different