

This book will be of interest to residents in psychiatry and psychiatrists interested in biological underpinnings of psychiatric disorders. It is an excellent reference for both clinicians and researchers. This book may also appeal to behavioural neurologists and psychologists. I expect this book to have a broad appeal because it connects research advances in basic sciences such as cellular biology, genetics, and imaging of neuropsychiatric disorders, with the understanding of their etiology and management. It thus provides a firmer and more scientific basis for clinical decision-making. At the same time, it can serve as a very useful starting point for students and researchers who wish to explore new possibilities for research or to understand their new data in context of existing body of knowledge.

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INVESTIGATING NEUROLOGICAL DISEASE. EPIDEMIOLOGY FOR CLINICAL NEUROLOGY. 2001. Edited by Albert Hofman and Richard Mayeux. Published by Cambridge University Press. 313 pages. C\$93.92 approx.

The literature on clinical research in the neurosciences has had an explosive growth in the last several years. Clinicians face the increasing challenge of making sense of this abundance of clinical research and applying its results to their patients. There have been few organized efforts to provide clinicians in the neurosciences with the tools they need to successfully address this challenge. Hofman's and Mayeux's book is one example of such an endeavour.

Contrary to what the book's title would suggest, the focus is not on investigating neurological diseases in the sense of searching for diagnoses, but rather on carrying out various types of clinical research in neurological diseases.

The first half of this concise and clearly written book deals with contemporary aspects of clinical research methodology, such as survival analysis, genetic epidemiology, outcomes research, decision analysis, etc. The topics on research methodology are well-chosen, reflecting those most frequently encountered by clinicians. Unfortunately, the size of the book and the large number of topics mandates brief chapters and economy of depth in the treatment of most themes. Readers will find this panoramic view of current clinical research methodology accessible and for the most part relevant. However, they will have to consult regular sources for a deeper understanding of most themes.

The second half of the book addresses thirteen common neurological conditions, with brief descriptions of diagnosis, etiology, epidemiology, intervention, prognosis and implications for clinical practice. Although the quality of the evidence is not systematically addressed, a major strength of this section is that most chapters support many of their statements with references to actual research data, which readers can consult if needed. Many of the chapters emphasize and describe epidemiological data, a useful compilation not often found in neurological texts.

Clinicians in the neurosciences will find this a useful resource to assist them in making sense of the evidence and bringing it to the bedside.

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ANTIEPILEPTIC DRUGS. 2002. Fifth Edition. Edited by Rene Levy, Richard Mattson, Brian Meldrum, Emilio Perucca. Published by Lippincott, Williams and Wilkins. 968 pages. C\$285 approx.

As someone who has the previous four editions of *Antiepileptic Drugs* sitting on his shelf (with pages well-dog-eared, and backs well-broken), I read this most recent edition with interest. I was not disappointed. It remains the gold-standard reference book on anticonvulsant drugs.

This is the fifth edition of *Antiepileptic Drugs*. This most recent version has been edited by R. Levy, R. Mattson, B. Meldrum and E. Perucca, who collectively bring a diverse wealth of clinical and international expertise to this edition. *Antiepileptic Drugs* is a multi-authored text with 127 different authors (five of whom are Canadian). These authors represent experts from around the world, from basic science to clinical science, from industry to government and academia. However, despite the plethora of authors, the book is well-edited, and thus reads evenly and easily. The text has been substantially updated from previous editions. Chapters concerning "traditional" drugs have been updated; new chapters have been added to capture the unprecedented expansion in the field of epilepsy pharmacotherapy.

The book is assembled in a very logical and user-friendly fashion with 18 sections. Section I starts with 15 chapters assembled under the general heading of "General Principles". These 15 chapters comprehensively cover a range of topics, including the neurophysiological effects of anticonvulsant drugs, drug-drug interactions, combination therapy, laboratory monitoring of blood levels, and the use of anticonvulsant drugs in children, women and the elderly. Following this thorough introduction, the book then dedicates the following 16 sections each to a separate anticonvulsant drug (or class thereof): benzodiazepines, carbamazepine, felbamate, gabapentin, lamotrigine, levetiracetam, oxcarbazepine, phenobarbital, phenytoin, primidone, succinimides, tiagabine, topiramate, valproic acid, vigabatrin and zonisamide. Typically each one of these drugs has four or five chapters dedicated to it, which comprehensively discuss topics such as mechanisms of action, pharmacokinetics/biotransformation, clinical uses, interactions with other drugs, and adverse effects. Where appropriate, other topics, such as efficacy and use in nonepileptic disorders, are also presented. For each of these drugs, the information provided is complete and up-to-date, while maintaining reasonable succinctness. The final section of the book (section XVIII) gives a superb overview of drugs in early clinical development. Future agents such as ganaxolone and harkoseride are discussed.

The strengths of this book are many. It is as up-to-date as a hardbound textbook can be. No major topic related to anticonvulsant drugs has been neglected. All topics are dealt with in an authoritative and complete manner, with a writing style that, in general, presents facts in an easily assimilated manner. The chapters on mechanisms of action are particularly strong and well-written. Valuable clinical information is provided for the newer agents such as levetiracetam and zonisamide. Each chapter is exceedingly well-referenced. Notwithstanding the utility of modern computer-aided algorithms for searching literature databases, many chapters contain citations to "literature gems" not easily found during a routine literature search. This reviewer found no substantive factual error over the course of this book.

The weaknesses of this book are few. As a minor criticism, I felt

that the section on benzodiazepines was perhaps too brief, and that the subtle differences between the various benzodiazepine analogues could have been better discussed. Also, there are a few redundancies; for example, almost identical figures showing the metabolism of carbamazepine are given in several different chapters. The quality of the figures is somewhat variable throughout the text. In several places, the figures are rather blurry, lacking clarity and crispness. This is particularly true of the molecular formulae given for several of the anticonvulsant drugs. Finally, although this criticism is probably unique to this reviewer, I felt that there was a paucity of molecular formulae, especially for the new, emerging drugs.

In conclusion, this edition of *Antiepileptic Drugs* continues an already strong tradition, and re-establishes the dominance of this book as the definitive reference in the area of anticonvulsant drugs. This book is a "must reference" for clinical epileptologists, clinical pharmacologists involved with anticonvulsants, and for anyone who extensively employs anticonvulsant drugs in their day-to-day practice.

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SLEEP MEDICINE. 2002. Edited by Teofilo L. Lee-Chiong, Jr., Michael J. Satela, Mary A. Carskaon. Published by Lippincott Williams & Wilkins. 737 pages. C\$109 approx.

This multi-authored, 71 chapter, text contains all the essential and expected chapters regarding normal sleep physiology, neurobiology, ontogeny of sleep and the usual myriad of sleep disorders. What distinguishes this text from others is the strong evidence based approach adopted by many of the authors in areas of sleep medicine where opinion or convention might have prevailed. This is particularly true in chapters relating to respiratory problems in sleep and the conventional therapies such as CPAP, use of oral appliances and surgery for obstructive sleep apnea (OSA). The other outstanding feature of this publication is the excellent detailed coverage of the technology of polysomnography including esophageal and nasal pressure monitoring, multiple sleep latency testing and maintenance of wakefulness testing. There are also

relatively detailed chapters covering video-electroencephalography and actigraphy.

Adult neurological and respiratory disorders and pediatric disorders are discussed separately helping to accentuate the differences in these patient populations. The text is organized so that each chapter can stand alone as a reference source. For example, all of the chapters on sleep disordered breathing, neurological, or neuromuscular disorders are introduced with appropriate definitions and clinical descriptions before more detailed text regarding investigation and treatment of these disorders.

The text offers insightful and clinically relevant chapters on sleep in the critically ill patient, drugs of abuse, psychiatric and neurological medications and the neuropharmacology of sleep medicine. There is also a much-welcomed chapter on forensic sleep medicine. Some chapters especially dealing with neurological disorders in sleep fall short of the comprehensive standard set in other chapters. For instance, the chapters on miscellaneous neurological disorders and sleep, and seizure disorders in sleep, deal with too broad a topic and as a result can do little more than list some essential epileptic syndromes or neurological disorders (clusters or migraine) which have an impact on sleep or are affected by sleep.

Because each chapter is written as a potential stand-alone reference, there is much repetition throughout the text especially in regards to definitions and clinical descriptions of sleep disorders. Although this may seem tiresome to a reviewer, the authors have allowed for this overlap so that a reader, less familiar with respiratory, psychiatric or neurologic disease, might be better able to understand these conditions in the context of sleep medicine.

This text is strongly recommended for practitioners with an interest in sleep medicine, including general practitioners, pediatricians, neurologists and respirologists. It would be of value in any sleep lab given the sections on polysomnography and sleep scoring. Its only weakness is perhaps that, like many reference texts, it provides material relating to all sleep disorders and has limited depth in some areas. Nevertheless, it is considered an excellent starting point for any reader with an interest in sleep medicine.

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