

## Book Reviews

**PRINCIPLES OF NEUROLOGY. 6TH EDITION. 1997.** By Raymond D. Adams, Maurice Victor, Allan H. Ropper. Published by McGraw Hill. 1618 pages.

This is the sixth edition in the past 20 years of this classic text. It has expanded 60% in this time from 1040 to 1618 pages and added a third author, Allan H. Ropper. He brings teaching skills and attitudes similar to the two senior authors plus his expertise in peripheral nerve disease, coma and stroke, as well as his abiding and lengthy concern for the critical care neurologic patient.

Again the book approaches neurology from the "major manifestation(s)" of disease and the anatomy, physiology and natural grouping of these to lead to a known syndrome or disease. The contributions of basic science methods and research, where applicable to diseases, are added to the primary clinical presentations.

I have read all the pages devoted to epilepsy, headache, multiple sclerosis, muscle diseases, Parkinson's disease, stroke, and neuropathies. Including the physiology, pathology and diagnostic aids applicable to these various diseases this amounts to 30% of the book. All are superb. The sections on muscle physiology, aids to diagnosis, and diseases are a tour de force. Unfortunately, in the headache section the chimeric tension headache persists.

Perhaps the seventh edition should be in two volumes.

If students, residents, or physicians (neurologists, internists, pediatricians, intensivists, orthopedists or psychiatrists) want a near encyclopedia of neurology and can buy only one, buy this one.

The authors are again to be congratulated.

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**MINIMALLY INVASIVE THERAPY OF THE BRAIN. 1997.** Edited by A. De Salles and R. Lufkin. Published by Thieme. 292 pages. \$C246.00 approx.

This book is a multi-authored volume edited by a neurosurgeon and a radiologist, on an extremely important direction in modern health care – that of minimally invasive therapy. There are 21 chapters by a total of 40 authors, primarily neurosurgeons, neuroradiologists and radiation oncologists from the United States and Germany. In the preface, the editors state that the book is designed to document the new techniques available for treatment of brain pathologies that are competitive with the traditional large surgical approaches and that it is directed at the appropriate specialists as well as primary care physicians and motivated lay persons. The two latter groups would very likely not find this book particularly useful. In the preface there are also two "advertisements" on how to get more information on the course the editors have conducted for 5 years, which this reviewer finds a little too commercial.

The book is generally well written and edited and contains much valuable information on the basic concepts and tools available within the current armamentarium of physicians and surgeons involved in minimally invasive treatment of a variety of morphological and functional conditions affecting the brain. The book is attractively laid out although a significant number of reproductions

of imaging studies and other photographs and computer-generated graphics are of poor quality.

There are a number of conspicuous omissions from this text. Arguably the single most important building block for modern minimally invasive therapy was the development of frame-based stereotactic techniques over 4 decades ago. The most widely used minimally invasive techniques in neurosurgery to date world-wide have been stereotactic biopsy and stereotactic lesion-making and these important topics are not dealt with in any depth. At minimum a chapter by one of the authorities in the field on the indications, techniques, complications, and failure rate of frame-based stereotactic biopsy should have been front and center in this book. Stereotactic brachytherapy, while not terribly efficacious for malignant brain tumors, is a very interesting application of minimally invasive therapy with a fairly long history and this topic is treated only superficially in the chapter on radiosurgery of malignant brain tumors. An extremely useful and important technique for minimizing complications and length of hospital stay associated with image guided craniotomy is the technique of awake surgery with cortical mapping both to obviate the morbidity of a general anesthetic and to decrease the chance of incurring neurological deficit from disruption of vital cortical structures. A chapter on anesthetic techniques for minimally invasive brain surgery would have been a valuable addition to this volume. Finally, the modern frameless image-guidance systems are vital adjuncts to localizing small but strategically placed bone flaps and assessing the extent of tumor resection and this point could have been emphasized by including a surgical series from one of the experts in appropriation of importance and uplighting to various subtopics there are significant inconsistencies in the field. Conversely, in spite of the importance of radiosurgery in treating AVMs and benign brain neoplasms, this subject is probably over-represented in this volume with 5 chapters dedicated to various aspects of it. Besides the above cited inconsistencies in the length, depth of detail, and number of references from chapter to chapter which further weakens the book.

As the editors acknowledge, this is a rapidly evolving field. Peer-reviewed publications in the neurosurgical and imaging literature as well as presentations at national and international meetings and other forms of information networking will appear at increasing rates and this will represent the major source of information for physicians and surgeons involved in the care of patients with minimally invasive techniques. Courses and workshops on this subject, which the editors have pioneered, will also continue to play an important educational role. While this is overall a good book containing useful and well documented information and providing a good overview of an important and exciting area of medicine, it is not comprehensive, lacks detail in certain areas, and because of the rapid evolution of the field, will soon be outdated.

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**INFECTIONS OF THE CENTRAL NERVOUS SYSTEM. 2ND EDITION. 1997.** Edited by W. Michael Scheld, Richard J. Whitley and David T. Durack. Published by Kluwer Academic Publishers. 1064 pages. \$C267.00 approx.

This book is undoubtedly the "reference standard" for those seeking a text devoted to the topic of infectious diseases in the

central nervous system. Beyond library purchasers, this book is targeted on senior trainees and hospital based consultants in clinical neurology and infectious diseases. As is correctly highlighted in the preface, the editors suggest that the comprehensive nature of this text makes it appropriate for "advanced readers". This is the second edition of a book first published in 1991. The second edition is significantly expanded with 51 chapters compared to 37 in the first edition. Chapters are added to recognize CNS syndromes attributed to the herpes virus group. Esoteric infectious diseases of the central nervous system due to Whipple's disease and Bartonella infections are included. Two new chapters recognize the unique management problems of infectious diseases in post-neurosurgical patients in the intensive care unit. As with many multi-authored texts, this reviewer can't help but notice certain editorial biases. By way of example, the chapter on recognition and management of central nervous system infections in HIV patients is a mere 12 pages in length. On the other hand the chapter on central nervous system trypanosomiasis is 22 pages in length.

In the introduction to this text there is a avowed commitment to syndrome presentations wherever possible rather than microbiologically identified topic material. The very first chapter entitled "Approach to the patient with central nervous system infection" is a brief but beautifully organized example of a syndromic approach to the clinical presentation of patients with central nervous system infections. The chapters on "Acute Bacterial Meningitis", "Brain Abscess" and "Chronic Meningitis" adhere closely to the intended syndromic organization of the text. For this reason these chapters are particularly useful in guiding the clinician in investigation and empiric therapy before final microbiological or pathological results are available.

Many subsequent chapters that discuss bacterial, fungal and parasitic infections of the central nervous system are, however, organized on the classic format of microbiologically identified infectious diseases. Each of these chapters then contains a discussion of the epidemiology, pathology, clinical presentation, diagnostics, and therapeutics of each of these microbiological entities.

Overall the organization, writing, and editing of this text is of a high quality. The reference list at the end of each chapter is extensive indeed, sometimes running to over 400 references. Many of these references have been published since the first edition was released in 1991. Accompanying tabular material, algorithms, radiographs, and micrographs are of the highest quality.

In summary the second edition of this text remains the untested library standard for those practitioners of clinical neurology and infectious diseases who are seeking a highly authoritative text in the domain of infectious diseases of the central nervous system.

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**NEUROLEPTIC-INDUCED MOVEMENT DISORDERS.** 1996. Edited by Ramzy Yassa, N.P. Vasavan Nair and Dilip U. Jeste. Published by Cambridge University Press. 494 pages. \$C130.00 approx.

The book "Neuroleptic induced Movement Disorders" has been written in 7 parts: Part 1. Historical Perspective; Part 2. Clinical aspects of tardive dyskinesia; Part 3. Mechanisms underlying tardive dyskinesia; Part 4. Measurement of tardive dyskinesia; Part 5. Tardive dyskinesia in different populations; Part 6. Other neuroleptic movement disorders; and, Part 7. Treatment of tardive dyskinesia.

In Part 1, the authors describe the historical perspectives about tardive dyskinesia and discuss the role of different academic organizations in updating the knowledge concerning tardive dyskinesia.

In Part 2, the clinical aspects of tardive dyskinesia have been discussed with special reference to age, gender, type of psychiatric disorders, diabetes mellitus, genetic factor, smoking, neuroleptic treatment, and anticholinergic drugs. Role of neuroleptics in producing movement disorders has been emphasized as a multivariate rather than univariate risk factor along with age, type of neuroleptic with dosage and duration.

In Part 3, basic sciences related to neuroleptic induced movement disorders have been described. In addition to, neurochemistry, where striatal receptors are the center stage of multiple neurohormonal interactions, advances regarding the role of neuroimaging and role of animal model in further studies of pathophysiological aspects have been made. Close relation of cognitive disturbances and emergence of dyskinesia have been observed.

In Part 4, a short discussion about the utility of several instrument measures for purposes of documentation, detection of subclinical dyskinesia and differential diagnosis from other closely similar movement disorders has been included. This part provides a scope of selecting an option for assessment of different movement disorders for research purposes.

In Part 5, the authors have discussed in great depth the epidemiology of tardive dyskinesia in different populations. Low prevalence rate in Asia populations has been explained in the basis of limited neuroleptics usage and possible genetic differences. These observations encourage the future epidemiological study of the genetics of this disorder.

In Part 6, a good discussion about other varieties of drug induced disorders such as drug induced Parkinsonism, acute dystonia, tardive dystonia and tardive akathisia has been provided with respect to clinical features, risk factor, differential diagnosis and management protocol.

In the last section the authors have included a discussion of the role of newer antipsychotic drugs in reducing the incidence of extra pyramidal side-effects, and the possible role of gabergic transmission in pathophysiology and treatment of tardive dyskinesias. A short introduction about the encouraging role of biofeedback as an adjunctive procedure for training oral-lingual suppression of dyskinesic movement has been included.

This book is a comprehensive book on neuroleptic induced movement disorders – possibly written keeping in mind the need of those engaged in psychiatric practices. This will be helpful for residents, fellows, practicing psychiatrists, researchers, and clinical neurologists with interest in Movement Disorders. However it could be better if more tables could be added in epidemiology section. A section on clinical pattern of different movement disorders under tardive dyskinesia and differential diagnosis from chorea, athetosis and multiple tic disorders could be beneficial. Approach to treatment could be given in an algorithm form for quick overview.

Lastly, the authors should be congratulated for completing the great task of writing this book, particularly against the background of the inclusion of this topic mostly as a chapter in most of the text books on Neurology, Psychiatry and Movement Disorders.

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