

BOOKS REVIEWED

SURGERY OF THE CRANIOVERTEBRAL JUNCTION. SECOND EDITION. 2013. Edited by Nicholas C. Bambakidis, Curtis A. Dickman, Robert F. Spetzler, Volker K.H. Sonntag. Published by Thieme Medical Publishers, Inc. 546 pages. C\$350 approx.

Rated ☆☆☆☆☆

Management of conditions related to the Craniovertebral Junction (CVJ) is difficult due to the complex anatomy of the region as well as the number of pathologies it may exhibit. For these reasons the appearance in 1998 of the first edition of this textbook was very much welcomed by the neurosurgical community.

The general organization of the second edition follows closely the first. The Editors, from The Case Western Reserve University School of Medicine, and The University of Arizona College of Medicine, have assembled 80 Contributors, mainly from North America, most of who are recognized experts, and have made significant contributions to Neurosurgery on their assigned topics. The Editors themselves have written some of the 42 chapters.

Text is now presented in a two column format, more compact but still easy to read, reducing the number of pages from 828 to 546. Chapters are abundantly illustrated, and the illustrations, taken from multiple sources, have great clarity and precision. This reviewer is very much taken by the elegance of the illustrations coming from the Barrow Neurological Institute.

The material is offered in four sections, which follow a didactic progression from I. Foundations for Surgical Treatment, and II. Surgical Indications and Decision Making, to the two last sections dedicated to more technical aspects of surgical treatment: III. Surgical Techniques and IV. Fixation and Fusion Techniques.

Section II, Surgical Indications and Decision Making, is the true heart of the work, blending consideration of the various factors related to patient and disease, with the technical solutions available, to arrive at the best decision for individual cases.

As the pathologies range from congenital to metabolic, CSF-circulation related, traumatic, inflammatory, neoplastic and vascular, appropriately there is a chapter on radiosurgery for tumors (Ch. 18) and a chapter dedicated solely to endovascular management of vertebral artery dissections and vascular insufficiency (Ch. 14).

The expanded endonasal approaches have also been added to the more established transoral approaches for lesions about the midline from the clivus to C2 (Ch. 26).

The book comes with a CD presenting ten short intraoperative videos, one of which, about a giant midbasilar aneurysm case, is spectacular, in addition to three animations (Retrosigmoid, Transpetrous and Far Lateral Approaches), and anatomical dissection views and animation of the CVJ.



This work will continue to be a treasured reference for skull base, spinal and general neurosurgeons.

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FAMOUS FIRST PAPERS FOR THE NEUROINTENSIVIST. 2013. By Eelco F.M. Wijdicks. Published by Springer. 289 pages. C\$220 approx.

☆☆☆☆☆

Rated

In comparison to other medical subspecialties, many components of neurologic practice remain frustratingly entrenched in the “low levels of evidence” and expert opinion. Thus much of our current practice continues to evolve based on wisdom passed down from the Giants, some of which has little to no “empirical” support, not to attribute any less value. For example, the polarizing Dr. Landau, in one of his infamous “neuromythology” essays, addressed the question of localizing posturing movements in coma; “Somehow, during a period after World War I, clinical neurologists developed the mythical concept of decorticate rigidity. There were neither experimental nor clinicopathological correlations to demonstrate that a primate peeled of cerebral cortex had such a condition” (1). While this clearly ignores the careful work of Sherrington (2) and others, it is perhaps fair - indeed accurate - to question the direct application to human conditions.

In his latest work, and by his own confession one of his most important, Dr. Wijdicks addresses the origins (and occasional inaccuracies) of the most central themes and ideas in neurocritical care. As per his other works, his personal approach and opinions are universally present and consistent throughout this series, providing a rewarding continuity to the reader, despite the brevity of each section. The topics are arranged as logically as is possible given the range, and no major themes in neurocritical care have been excluded. In roughly chronological order, the major sections progress through the origins of neurocritical care units, famous clinical signs, syndromes, emergency treatments, early trials, and outcome studies. There is also a concluding section on bioethics, which could perhaps have been expanded. Each section is described in reference to the major paper that led to changes in practice, its context in medical history, and how the findings were integrated into medical culture. Each note is also accompanied by a reproduction of the original paper, which provides an appealing connectedness to the authors’ rationale and challenges at the time of writing.



The individual “short historical notes” contain a number of surprises about origins of current practice that are probably otherwise lost on most general neurologists, and quite likely many neurointensivists. One consistent highlight is the number of contributors to each of the many singularly eponymic themes in NCC, in some cases probably attributed to the wrong author. A second point of emphasis is that much of the groundwork from seemingly unrelated areas of acute neurology and neurosurgery (before the unifying field of neurocritical care, or even general critical care), was accomplished by a small number of contributors who covered a vast array of content. Most notably, this list of founding fathers includes Cushing, Plum, Posner, Jennett, Miller-Fisher, Adams, and Gowers, among others.

Examples of the above points include the origins of IVIG use in Guillain-Barre syndrome, after a patient with CIDP was accidentally given a plasma infusion rather than exchange, leading to improvement and further exploration of its potential use in GBS. The first Coma scale was probably introduced by Ommaya, whose name is now almost exclusively associated with his ingenious reservoir (his other accomplishments are no less impressive). Wijdicks also includes relevant direct quotations from the original papers when appropriate, such as the rationale for the three components of the Glasgow Coma Scale.

With this latest addition to his vast list of publications, Dr. Wijdicks provides another important and insightful contribution to the expanding field of neurocritical care, that will be well-received by general intensivist, neurologists, neurosurgeons, and neurointensivists. The overall tone of the book supports the ongoing mission of neurocritical care, perhaps best summarized in his references to the work of Munro, who was famously known as the “father of paraplegia” for his untiring work with victims of spinal cord injury. Dr. Munro was known as an eternal optimist in the face of devastating neurological injury, as he “refused the defeatist attitude of his colleagues”.

“Famous First Papers for the Neurointensivist” provides a unique and important look into the origins and current state of neurocritical care, and is easily read in sections or continuity. This work is highly recommended as an exploration of these foundations, a critical review of their suitability to current practice, and an incentive for ongoing exploration into improving outcomes for critically ill patients with neurologic disease.

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REFERENCES

1. Landau, W. *Clinical neuromyology: and other arguments and essays, pertinent and impertinent*. New York: Futura: 2001. p. 83.
2. Sherrington CS. Decerebrate rigidity, and reflex coordination of movements. *J Physiol*. 1898 Feb 17;22(4):319-32.

HYPERKINETIC MOVEMENT DISORDERS. 2012. Edited by Oksana Suchowersky, Cynthia Comella. Published by Humana Press. 288 pages. C\$190 approx.

Rated ★★★★★

This is a multi-author book on Hyperkinetic Movement disorders with the exception of tremor. The book includes all of the generally accepted hyperkinetic movement disorders as separate chapters. The author list is excellent and all of the authors are well published in the respective areas that they have written about. The editors are well-established movement disorders neurologists of international calibre and so the credibility and quality of material is excellent. The general structure of the chapters is reasonably consistent with a very good set of illustrative video based vignettes, followed by the usual discussions of epidemiology, clinical features, differential diagnosis and treatment for each of the syndromes. The ten chapters are easy to read, succinct and give a good overview. Clearly, many of the syndromes are extensive in themselves and this book cannot do justice to them in much detail. However, since the reference list is extensive, it allows the reader the choice of doing the more in depth reading directly from the source if needed, while providing those that need a rapid reference, just that. This is an important balance that the editors have achieved in this book. On the whole, this book can serve as a comprehensive guide to the non-movement disorder specialist and neurologist, to residents and also to allied health care field such as movement disorder nurses and practitioners.



Chapter 1 provides a review of the pathophysiology of the various hyperkinetic disorders. The initial pages provide a very brief outline of the anatomy and chemistry of the basal ganglia and also the systems level electrophysiological properties. The authors then present a synopsis of each of the disorders individually for all of the conditions covered in the book. I like this approach as it allows the reader to see the similarities and differences that are currently known for the conditions together as compared with them being presented in each chapter. The chapter is very well referenced.

Chapter 2 covers Huntington disease and the choreas. There are illustrative video segments at the start. The videos are very good and easy to see, although I found them occasionally choppy despite having an excellent internet connection. Also, there is no video of Wilson's disease here, which would have been helpful.

Chapter 3 is dedicated to dystonias and while this is an enormous topic, the authors have given a brief glimpse of the important primary and secondary dystonias. I liked the introduction as it introduced and explained important terms such as geste and paradoxical dystonia. The table of secondary dystonias is comprehensive. Similarly in the treatment section, the special cases and surgical treatment have also been touched upon.

Chapter 4 deals with Tourettes syndrome and follows the same structure as the previous chapters. An especially strong point in this chapter is the coverage of the psychiatric issues that have been