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## BOOK REVIEW

# Advances and Technical Standards in Neurosurgery, Vol. 32

J.D. Pickard, N. Akalan, C. Di Rocco, et al, eds. New York: Springer Wien; 2007, 267 pages, 95 figures, \$179.00.

**A***dvances and Technical Standards in Neurosurgery* is Volume 32 of a series sponsored by the European Association of Neurosurgical Societies, mainly intended for use in training neurosurgeons. Although the book is primarily for this audience, the editors also hope that these volumes are useful for experienced neurosurgeons. The first part of each volume presents advances in neurosurgery and related fields, and the second part presents detailed descriptions of standard procedures and established topics.

The first chapter in the “Advances” section is about “The Transition from Child to Adult in Neurosurgery.” This is an extremely interesting and provocative discussion of multiple issues related to continuing care of patients who undergo neurosurgical treatment in childhood. General concepts such as moving from the care of a pediatric neurosurgeon to an adult neurosurgeon are discussed, along with specific discussions of patients with tumors, myelomeningocele, and hydrocephalus. The investigators have analyzed long-term outcomes for their own patient population. Their patients’ mortality rates during adulthood related to their neurologic disease were rather low; however, the proportion of patients employed in normal jobs in adulthood was quite low at 35.6%, 18.7%, and 11.5% for tumors, hydrocephalus, and myelomeningocele, respectively. Intelligence quotient scores are discussed along with the prevalence of different neurologic sequelae. Concepts of organization of the transition of care of the patient from pediatric neurosurgeon to adult neurosurgeon are discussed. One interesting conclusion is the sobering fact that few of the patients became successful adults in competitive environments.

The second chapter in the “Advances” section discusses conflicts of interest in medical practice. A variety of different types are covered such as financial and intellectual conflicts;

and conflicts related to surgery, academic duties, and relationships with industry. The discussions touch on issues that have been of recent public interest, including gifts to physicians from pharmaceutical interests and the role neurosurgeons may play in promoting medical devices. Conflicts of interest related to the delegation to trainees of the responsibility for surgery and other patient care are discussed. The author points out

that “one of the fundamental aspects that characterize professionalism is the duty to self-regulate.”

The third chapter in the “Advances” section covers neurosurgical treatment of perineal neuralgias. The relevant anatomy and pathology, followed by treatment and treatment results, are discussed. This chapter is relatively well illustrated with anatomic diagrams and photographs of anatomic dissections.

The first chapter in the “Technical Standards” section covers spinal cord stimulation for ischemic heart disease and peripheral vascular disease. The history of neuromodulation for these disease processes is reviewed followed by discussions of the mechanisms of action. The implantation technique for the spinal cord stimulator is described and illustrated. The chapter attempts to make a case for the efficacy of the procedure for vascular disease.

The next chapter covers surgical anatomy of the petrous apex and petroclival region and describes lateral skull base approaches to the region. It includes a detailed description of the anatomy with very good illustrations of the skull base and dissections of injected anatomic specimens. The concept of the organization of the surgical anatomy of the region into triangles is thoroughly discussed. The surgical approaches are also described in detail with accompanying illustrations of cadaver dissections and actual operative exposures. Representative cases are also illustrated with accompanying neuroimaging.

The next chapter discusses percutaneous destructive procedures on the upper spinal cord and brain stem for cancer pain. These techniques are CT-guided, and the chapter is well illustrated with diagrams and CT images. Results and complications from the authors’ series are presented.

The final chapter is an extensive review of carpal tunnel syndrome. This review is comprehensive, covering anatomy, pathophysiology, and diagnostic work-up by a variety of methods. Nonoperative and operative treatments are presented. Open and various endoscopic and minimally invasive surgical procedures are reviewed. This chapter is reasonably well illustrated with diagrams and operative photographs. Results and complications are discussed, including an emphasis on avoiding complications.

This book has some interesting discussions of a collection of relatively narrowly focused neurosurgical topics. It is not heavily illustrated with neuroimaging and thus may not be of great interest to neuroradiologists. It may be of use to neuroradiologists who need to expand their knowledge of specific topics that are covered in this book. The chapter on the petroclival region is the one that is most likely to be helpful to radiologists. The editors point out that all contributions to these volumes are published in English, regardless of the author’s primary language. As frequently occurs in that situation, the writing style suffers somewhat from translation, and some passages make for tedious reading. On the whole, however, this book contains substantial useful content on each of the topics presented.

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