

Michael J. Avram, Ph.D., Editor

Ultrasound-guided Regional Anesthesia and Pain Medicine.

By Steven L. Orebaugh, M.D., Nizar Moayeri, M.D., Gerbrand J. Groen, M.D., Ph.D., Stephen M. Breneman, M.D., Jacques Chelly, M.D., Ph.D., M.B.A. Edited by Paul E. Bigeleisen, M.D. Philadelphia, Lippincott Williams & Wilkins, 2010. Pages: 320. Price: \$139.00

One of the prerequisites for learning ultrasound-guided procedures is an in-depth understanding of sonographic anatomy and the basic principles of sonography. *Ultrasound-guided Regional Anesthesia and Pain Medicine* succeeds in providing a concise, yet thorough, elucidation of these topics.

Ultrasound-guided Regional Anesthesia and Pain Medicine is organized into seven main sections, with color coding for each of these sections enabling easy reference. In the first section, "Fundamentals of Equipment, Ultrasound, and Microanatomy," the authors begin with a concise description of the equipment required for conducting ultrasound-guided peripheral nerve blocks. They continue with the evolution of ultrasound-guided regional blocks and its current status as an effective tool for accurate and safe needle placement. This is followed by chapters on the physics of sonography and a detailed review of the microanatomy of the peripheral nervous system and its implications for nerve blocks, aided by excellent illustrations. The next three sections on upper and lower extremity blocks as well as central blocks detail the authors' techniques for performing the various ultrasound-guided extremity blocks as well as labor epidural and thoracic paravertebral block. These are followed by sections on pediatric regional anesthesia, pain blocks, and the future of ultrasound.

The main attribute of this book that sets it apart from similar atlases is its high quality illustrations, especially the microanatomical dissections of the brachial, thoracic, and lumbar plexuses. Its side-by-side comparisons with ultrasound images of the region help the reader gain an in-depth understanding of sonographic anatomy.

Other highlights of this book include color-coded page margins, which facilitate easy reference, as well as online access to its complete contents, complete with video demonstrations of some of the blocks that are described in the book. This feature should be very helpful to the novice ultrasound user and reflects the didactic spirit of this book.

The chapters on ultrasound in rheumatology and endoscopic celiac ganglion blocks may make it appealing to a multidisciplinary readership. The section on the future of ultrasound serves as a fascinating introduction to emerging technologies in the

arena of ultrasound imaging. However, some aspects of this section, such as "Medical Image Segmentation Using Modified Mumford Segmentation Methods," may be too technical for most clinicians.

One of the potentially controversial chapters in this text is "Ultrasound-guided Intraneural Injection: A Powerful Tool for Regional Anesthesia," in which the authors discuss the merits of subepineural injections and seem to suggest that, based on current studies, this should be a reasonable practice. However, the studies looking at this issue are few in number. In my opinion, the merits of including subepineural injection as a chapter in a textbook of this caliber is open for debate until more studies are available that consistently show it to be a safe practice.

This atlas would have been even more appealing if not for some minor lapses in editing quality. For example, on page 132, a reference is made to figure 22 but it is left to the reader to guess which figure 22 is being referred to: figure 22-1a, figure 22-1b, or figure 22-1c.

Similar inconsistencies include discrepancies on page 150 where patient position was described as supine though figures 25-2 and 25-3 illustrate the procedure being done with the patient in the prone position. In addition, readers are mistakenly referred to figures on page 222. However, these relatively minor lapses do not detract significantly from the overall quality of this superb reference work.

In conclusion, I think this book would be a great resource for both the novice trainee and the seasoned clinician interested in the nuances of ultrasound-guided procedures. I would recommend *Ultrasound-guided Regional Anesthesia and Pain Medicine* as a valuable addition to the library of anyone who practices these procedures.

Antony R. Tharian, M.D., Advocate Illinois Masonic Medical Center, Chicago, Illinois. tonytharian@aol.com

(Accepted for publication May 7, 2010.)

Neurologic Complications of Critical Illness,

Third Edition. By Eelco F. M. Wijdicks, M.D., Ph.D. Series edited by Sid Gilman, M.D., and William J. Herdman, M.D. New York, Oxford University Press, 2009. Pages: 480. Price: \$129.95.

Diagnosis and management of neurologic disorders in the intensive care unit (ICU) are challenging. Advances in the knowledge and understanding of pathophysiology and clin-

Mark A. Warner, M.D., served as Handling Editor for this book review.