

Mark A. Warner, M.D., Editor

A Practical Approach to Transesophageal Echocardiography, 2nd ed. Edited by Albert C. Perrino, Jr., M.D., and Scott T. Reeves, M.D. Philadelphia, Lippincott Williams & Wilkins, 2008. Pages: 493. Price: \$99.00.

Cardiothoracic and cardiovascular anesthesiologists have widely adopted transesophageal echocardiography (TEE) as a diagnostic and monitoring modality, and are increasingly expected to provide the cardiovascular surgeon or interventionalist with information crucial for periprocedural decision-making. These developments are reflected in the program requirements for subspecialty training in cardiothoracic anesthesiology, and by the achievement of testamur status in the National Board of Echocardiography's Examination of Special Competence in Perioperative Transesophageal Echocardiography (or the relevant recertification exam) by more than 3,000 physicians at the time of writing.

Constructive periprocedural application of TEE requires specific knowledge beyond an understanding of the general principles of echocardiography. This has led to the publication of several texts aimed at the perioperative TEE practitioner. For the second edition of their textbook *A Practical Approach to Transesophageal Echocardiography*, originally published in 2003, Drs. Albert Perrino and Scott Reeves have commissioned chapters from 28 contributors, including the editors. All authors are from North American institutions; many of them enjoy high name recognition in cardiothoracic anesthesiology.

The book has 21 chapters and is divided into 5 sections. The first section, Essentials of Two-Dimensional Imaging, deals with ultrasound physics, the standard two-dimensional examination, the evaluation of left ventricular systolic function, and the echocardiographic diagnosis of myocardial ischemia. The subject matter of the three chapters of section two, Essentials of Doppler Echocardiography, while somewhat self-evident, also includes the evaluation of diastolic function. Section three, Transesophageal Echocardiography in Valvular Disease and Surgery, is the largest part of the book. Mitral valve pathology and mitral valve repair are discussed in three chapters, aortic valve pathology is addressed in two chapters, and one chapter each deals with the evaluation of prosthetic valves and right-sided cardiac structures and function. Clinical Challenges, the fourth section, has five chapters covering TEE evaluation of the thoracic aorta, congenital heart disease, coronary revascularization, and cardiac masses, as well as application and utility of TEE in the intensive care unit. The fifth and final section of the book is entitled Man and Machine. Its two chapters discuss echocardiographic artifacts and how to optimize image quality by appropriately setting the echocardiography console controls.

Each chapter is followed by a bibliography and 10 to 20 self-assessment questions, the answers to which are provided at the end of the book. An extensive appendix comprises useful tables summarizing standard two-dimensional TEE views, normal values for cardiac dimensions, formulas for hemodynamic calculations, hemodynamic data for many common prosthetic heart valves, and current criteria for the echocardiographic grading of the severity of valvular heart disease. The book is not accompanied by a CD or DVD.

Appropriately for a highly visual subject matter, the book is well illustrated. Many excellent color drawings demonstrate cardiac anatomy and explain physical principles. The numerous echocardiographic images, many of them also in color, represent the anatomy or pathology under discussion superbly. As everybody who has written or lectured on echocardiographic subjects is aware, locating that perfect still image can require hours of searching, an investment of time and effort from which the authors of this text have clearly not shied. The

(almost complete) absence of transthoracic echocardiographic images from this TEE textbook also deserves favorable mention.

Some practical guides are anything but. In contradistinction, *A Practical Approach to Transesophageal Echocardiography* does live up to its motto. The text reads easily and reflects extensive practical experience of the authors and editors with their subject matter. Most chapters include background information specifically relevant to perioperative echocardiography, step-by-step descriptions of the pertinent aspects of the TEE examination, and/or an outline of the author's personal approach to the problem under discussion. Both the selection of topics and the content of individual chapters are balanced and clinically relevant. The temptation to include "everything there is to know" has generally been resisted.

No book review is complete without some quibbles: The number of literature references 5 yr old or less ranges widely (from 0 out of 39 to 10 out of 14); however, several chapters are notable for very few recent references, despite the publication of a number of relevant practice guidelines over the course of the past 5 yr. The chapter on TEE of the thoracic aorta does not discuss TEE in the evaluation of traumatic aortic injury. I also got the impression that some self-assessment questions might have benefited from more careful editing. These criticisms are minor, though, and should not detract from the credit due to the editors and contributors.

In summary, I found perusing *A Practical Approach to Transesophageal Echocardiography* both instructive and enjoyable (despite only recently having prepared for the TEE recertification exam). The book is well organized and sufficiently comprehensive, yet concise enough to serve as an introductory text. The excellent illustrations, the practical perspective maintained throughout, and the useful appendix are particularly strong points. I will be recommending *A Practical Approach to Transesophageal Echocardiography* to anesthesiology trainees and other students of perioperative echocardiography, and look forward to consulting my own copy in the future.

Jörg Dziarski, M.D., F.R.C.A., University of Washington, Seattle, Washington. jorgd@u.washington.edu

(Accepted for publication October 24, 2008.)

Interventional Pain Management: Image-Guided Procedures, 2nd ed. Edited by P. Prithvi Raj, M.D., Leland Lou, M.D., Serdar Erdine, M.D., Peter S. Staats, M.D., Steven D. Waldman, M.D., Gabor Racz, M.D., Michael Hammer, M.D., David Niv, M.D., Ricardo Ruiz-Lopez, M.D., and James E. Heavner, D.V.M., Ph.D. Philadelphia, Saunders Elsevier, 2008. Pages: 623. Price: \$119.00.

Dr. Raj has assembled an outstanding group of 35 internationally known authors to compose this in-depth revised edition of *Radio-graphic Imaging for Regional Anesthesia and Pain Management* that had its premiere publication in 2002.

The second edition expands on interventional pain management while continuing to focus on regional anesthesia. This publication not only targets clinical and academic anesthesiologists, but it is also directed at interventionalists from various other specialties who perform interventional pain procedures.

This text is divided into 7 sections, comprising 37 chapters in 623 pages. It commences with general topics such as Imaging Techniques and Drugs Used. These are followed by five sections that narrow in on interventional injection techniques that literally range from head to toe. The final sections include new chapters such as Advanced Techniques and Emerging Techniques (e.g., Cranial Stimulation and Percutaneous Therapeutic Procedures for Disc Lesions). Included with this

Dr. Bellinger is a speaker for Duloxetine produced by Lilly, Indianapolis, Indiana.

expansive work is a DVD with educational video demonstrations of hypogastric plexus, as well as lumbar sympathetic and splanchnic nerve blocks.

My initial impression upon opening and surveying this book was the presence of an ample amount of very practical, relevant, and instructional black-and-white images about anatomy, C-arm positioning, injection techniques and equipment. Among the most helpful of these images are valuable x-rays about abnormal dye spread.

The editors comprise a group of outstanding physicians who have contributed significantly to the subspecialty of interventional pain medicine. The chapter on radiofrequency ablation (RFA) is an example of the talented lineup in this text. Maarten van Kleef, M.D., Ph.D., (Professor and Chairman, Department of Anesthesia and Pain Management, University Hospital Maastricht, Maastricht, The Netherlands) Menno Sluifjter, M.D., Ph.D., (Consultant, Institute for Anesthesia and Pain, Swiss Paraplegic Center, Nottwil, Switzerland) and Jan Van Zundert, M.D., Ph.D., (Professor Emeritus, Department of Anesthesiology and Pain Management, University Hospital Maastricht, Maastricht, The Netherlands; and Department of Anesthesiology and Multidisciplinary Pain Center, Ziekenhuis Oost-Limburg, Genk, Belgium), all of whom have been prominent contributors to RFA literature for years, collaborated on this chapter. The result is that this section has an interesting overview of the history of RFA, an informative review of the modality, and theories regarding continuous and pulsed RFA. In addition, there is information about radio frequency generators, as well as support for clinical decision-making (e.g., practical considerations, indications, and contraindications).

This didactic text is complemented by an abundance of instructional images that are selected with care and relevance to the teaching of the interventional procedure. All chapters are structured, with complete references and plentiful illustration and images, in the same manner as the RFA chapter. Moreover, all of the well-researched topics in the book are thoroughly referenced.

The chapter about lumbar spinal neuraxial procedures has excellent descriptions of transforaminal and selective nerve root blocks. The anatomy is well explained, including an image about the anterior medullary artery in relationship to the neuroforamen and several demonstrations of the "safe triangle." The reader can see multiple pictures with appropriate and incorrect needle positioning as demonstrated by intradiscal, intravascular, and subdural dye spread. The C-arm positioning and injections are described using a step-by-step approach.

In general, all the topics in *Interventional Pain Management* are meticulously researched and explained. Beyond this, an additional strength of this clinical text is the use of highly relevant anatomy and diagnostic images. The informative images of correct and incorrect dye spread alone merit the purchase and review of this text. The interventional procedures are all explained in sound and competent instructional detail, so that clinicians can readily integrate this information into practice. The fluoroscopic, magnetic resonance, and computed tomographic images coalesce well with the graphic anatomical drawings that create highly effective renderings of the proper positioning and performance of injections. The historical review of the evolution of interventional pain management that is touched on in this work is both interesting and fascinating for any practitioner in this field. Each chapter of this text can sufficiently stand alone as an individual academic work, but together as a collection, the result is that *Interventional Pain Management* is a landmark clinical instructional textbook.

If you are looking for a quick overview of the topic of interventional pain medicine, this is not your book. This text is not to be thumbed through; to give the subject matter its due attention, the reader needs to commit to this study project. At times the authors delve deeper into a particular topic than I feel is necessary. Some of the graphics and images appear to be somewhat dated and could have benefitted from a color presentation.

In general, the DVD was disappointing, as it offers relatively poor-quality depictions of only three procedures: a hypogastric plexus block, a lumbar sympathetic block, and a splanchnic nerve block. Not

only are these procedures not among the most frequently performed, the video footage appears old, the transitions are often too rapid to follow, and in some sections, the visual and audio tracks are not precisely synchronized.

Overall, I believe that *Interventional Pain Management* is an excellent resource for any pain interventionalist in training and practice. There are a few books that allow a better last-minute review, but this text is the most comprehensive. I immensely value this extensive collection and believe it is a living piece of medical history.

Anke Bellinger, M.D., The University of Iowa, Iowa City, Iowa, anke-bellinger@uiowa.edu

(Accepted for publication October 29, 2008.)

Ultrasound-Guided Nerve Blocks on DVD: Upper and Lower Limbs Package. Edited by Alain Delbos, M.D. Philadelphia, Lippincott Williams & Wilkins, 2008. Price: \$329 (package price), \$179 (each DVD).

The *Ultrasound-guided Nerve Blocks (Upper and Lower Limbs)* interactive DVDs are excellent comprehensive sources of teaching nerve blocks using ultrasound techniques. Because of their success with two previous DVDs focused on regional anesthesia using nerve stimulators, the authors followed the same approach for teaching regional anesthesia using ultrasound.

This DVD set contains two parts—the first DVD looks at regional blocks of the upper limb and the second at regional blocks of the lower limb. They demonstrate the regional blocks that are most commonly performed. Both the animation and the video sections are equipped with a voiceover narration feature that explains every step in a very clear way.

The Upper Limbs DVD includes brachial plexus blocks using interscalene, supraclavicular, infraclavicular, and axillary approaches. It also presents the median nerve at both the elbow and at the forearm, the radial nerve block at the elbow, and the ulnar nerve block at the forearm. The Lower Limbs DVD includes blocks of the femoral nerve including a block of the fascia iliaca compartment; sciatic nerve with transgluteal, subgluteal, and popliteal fossa approaches; and saphenous and tibial nerves.

Every individual block is presented in the following sections:

The Animation section describes the indications and contradictions and uses well-presented, three-dimensional images that explain the anatomy and technique in a very easy-to-remember and comprehensive way.

The Video section provides video clips of every block and illustrates how they are performed on manikins. On the same screen you see every step of each procedure synchronized with an animation and ultrasound clips. This approach gives the viewer a clearly understandable explanation of each block, and also demonstrates in-plane and out-of-plane ultrasound techniques. This section also shows clips for catheter placements.

The Library section presents links to relevant literature for each block.

The Simulation section is what really distinguishes these DVDs from others. It allows for the performance of real-time virtual ultrasound blocks. It enhances the user's level of learning by adding an interactive method rather than having only a passive teaching experience. At the start of the simulation, there is a brief tutorial on how to use the simulation software. This application is very advanced and allows the user to draw lines and curves to outline landmarks. It also allows for the navigation of an ultrasound probe and gives an option to advance needles to different depths during the performance of a simulated block. Two of the most innovative elements of this section are the presence of a hide-and-show feature that allows visualization of the underlying structures for