vides further videographic details for 21 of the more complicated maneuvers. To call this entire atlas comprehensive would be an understatement.

With any medical textbook, no matter how complete, there may always be shortcomings that can be improved on. As a pain practitioner, most complaints are related to problems arising within the spine. Although never easy to truly diagnose by physical examination or cover in a book without enlarging it to twice its current size, perhaps more emphasis on these problems would be beneficial and, thus, make the book more attractive to the pain physician. In addition, better coverage of differential diagnosis and the relevant tests to distinguish between maladies would be a benefit in future editions.

Following in the tradition of Hoppenfeld's *Physical Examination of the Spine and Extremities*, ¹ Waldman's *Physical Diagnosis of Pain: An Atlas of Signs and Symptoms* may stand as a standard for the evaluation of pain for clinicians in the field. By thoroughly explaining the structure, inspection, and examination of the varied anatomic components, we are given a rationale for the pain and can, thus, tailor our therapies with a solid understanding of the problem at hand. Far too often as pain physicians, we may make diagnoses not by examination results but by the treatment itself in the hope that we are correct. With the help of Waldman's atlas, we will know we are correct.

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Reference

1. Hoppenfeld S: Physical Examination of the Spine and Extremities. Norwalk, CT, Appleton & Lange, 1976

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Fundamentals of Anaesthesia, 3rd Edition. Edited by Tim Smith, M.D., F.R.C.A., Colin Pinnock, M.B.B.S., F.R.C.A., Ted Lin, M.B.B.S., F.R.C.A. Cambridge, Cambridge University Press, 2009. Pages: 956. Price: \$141.99.

While reviewing *Fundamentals of Anaesthesia*, I could not help but find myself reading with a British accent. The third edition of this book represents an update of the publication geared toward trainees who sit for part 1 of the Fellowship of the Royal College of Anesthetists (FRCA) examination, taken in the first or second year of training. During the training program, the trainee anesthetist takes an examination in two parts (primary and final).

The editors are contributors to the FRCA examination; in the preface, editor Tim Smith indicates the desire to provide a textbook specifically designed around and correlated closely with the syllabus for the primary FRCA examination. This text accomplishes this goal by its organization and content, which promote reading and comprehension targeted specifically for that examination. The text includes the competency-based training framework for the examination in the newly created Appendix. All the chapters have been revised, and an update on preoperative assessment is included.

The third edition is organized into four color-coded sections. The first section (Clinical Anaesthesia) begins with preoperative, intraoperative, and postoperative management. It includes a new chapter on resuscitation, with the European Resuscitation Council and the British Difficult Airway Society algorithms. Other chapters include information about clinical anatomy, regional anesthesia, and special patient circumstances. The second section (Physiology) is comprehensive, covering physiologic aspects of all major organ systems and including topics such as cellular physiology, physiology of the nervous system, and the newly added pain physiology. Pharmacology is the third section, beginning with physical chemistry and including enteral, intravenous, and inhalation medications. The section concludes with clinical trial design and evaluation, which are often overlooked in a text this size. The fourth section (Physics, Clinical Measurement, and Statistics) uniquely presents chapters on mathematics, including calculus, vectors, ultrasonography, and magnetic resonance imaging. The section also includes chapters on clinical measurement, anesthetic equipment, and statistics. The Appendix concludes the book, which includes the primary FRCA syllabus. The subjects of physiology, pharmacology, and physics are well represented in the text, correlating to the examination syllabus.

The content of each chapter is clearly summarized on a title page into headings and subheadings. There are 650 black-and-white illustrations throughout the textbook. Although the text is geared toward the FRCA examination, it does provide relevant information for those not taking the examination. However, compared with an equivalent text, Clinical Anesthesiology, Fourth Edition, edited by G. Edward Morgan, Jr, Maged Mikhail, and Michael Murray, Fundamentals of Anaesthesia's layout may appear nonlinear in that topics (e.g., obstetrics and obstetric anesthesia) may course over several chapters, requiring the reader to review several chapters for completeness on a topic. Although the layout of the topics may appear nonlinear, the intended reader is the trainee taking the FRCA examination, Fundamentals of Anaesthesia faithfully adheres to this goal in the organizational schema, and the Appendix facilitates quick cross-references.

Fundamentals of Anaesthesia is highly practical, is an excellent learning text for training clinicians, and warrants its popularity among anesthesiology trainees in the United Kingdom system. The textbook is unique by cross-referencing most, if not all, of the topics contained on the licensing examination. It is a valuable reference text that provides anesthesia practitioners with essential information covering basic science, physics, and pharmacology. The individual chapters certainly serve as excellent sources of information, but the strength of the text lies in the reliability and fidelity to

the FRCA syllabus. Useful chapters not present in most training books include those about applied physics, basic statistics, clinical trials, and physical chemistry; in fact, I most enjoyed reading these chapters. These chapters and the book as a whole serve as excellent sources of information for the trainee in the United Kingdom system and abroad. Finally, the information contained in *Fundamentals of Anaesthesia*, with its cross-reference section, provides convenience for the busy practitioner.

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Atlas of Ultrasound-Guided Regional Anesthesia. By Andrew T. Gray, M.D., Ph.D.
Philadelphia, Saunders Elsevier, 2010. Pages: 365.
Price: \$165.00.

For those of us who perform regional anesthesia, ultrasound technology has revolutionized our practice in many ways. As the literature supporting the use of ultrasound guidance in regional anesthesia continues to mount, it has been a daunting task for practitioners who trained before this technology was in use to incorporate it into their practice. Atlas of Ultrasound-Guided Regional Anesthesia is a unique and extremely informative resource for practitioners who are attempting to learn ultrasound-guided regional anesthesia as well as experienced regionalists who want to expand their block armamentarium.

The Atlas consists of 62 concise chapters and two appendices of self-assessment questions and answers. Each chapter, which is up to 11 pages long, begins with a detailed description of the topic, followed by suggested techniques where applicable, clinical pearls, and extensive pictures.

The first 15 chapters of the book discuss the fundamental principles of ultrasound and its terminology. The author discusses various imaging techniques, transducer manipulation, and needle approaches. During many of the workshops I teach, participants express their frustration at not being able to "get a good image" when no one with experience is around to guide

them. These pages clearly and concisely explain the ultrasound concepts that are essential to becoming a skilled ultrasonographer and safely performing ultrasound-guided blocks.

The book's second section describes the ultrasound appearance of comingled structures, such as tendons, blood vessels, lymph nodes, pleura, and bone. The remainder of the book addresses ultrasound-guided techniques for upper extremity blocks, lower extremity blocks, trunk blocks, and head and neck blocks in a great deal of breadth but without too much depth on any given procedure. The final section is devoted to adverse events in regional anesthesia and using ultrasound for both prevention and recognition thereof. It is noteworthy that this book has the benefit of being available online so practitioners have ready access to the text and numerous pictures.

The *Atlas* is a valuable addition to our literature on ultrasound-guided regional anesthesia. Before the publication of this book, there were very few texts of this nature available to practitioners who are attempting to introduce ultrasound to their practice. The descriptions of ultrasound fundamentals are well written and well illustrated. The pictures in the book are plentiful, of outstanding quality, and clearly labeled—an essential feature for learning ultrasound-guided regional anesthesia.

The author gives helpful suggestions for block techniques. However, I would caution the reader to remember that many of the techniques described in this book represent regional preferences. With an adequate understanding of anatomy, there are a number of acceptable techniques for each block. A nice addition to this book would have been online video clips for each block, with transducer position as a correlate. Such a feature would allow demonstration of ultrasound principles and transducer manipulation, with corresponding changes in image appearance. Although still images are important, video clips add a great deal to a reader's understanding of block performance.

Overall, this book is extremely useful and well done. The *Atlas* is a much-needed addition to our literature and will be a valuable resource for practitioners who are learning ultrasound-guided regional anesthesia.

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