

same time, the government generously subsidized biomedical research without maintaining ownership of the resultant discoveries for the American public. The result is that today significant wealth has been obtained by entrepreneurial physicians who become involved with the pharmaceutical/biotech industry and medical device companies, or started their own medical consulting business or partnership with the health insurance industry, and specialty hospitals and clinics.

In the concluding paragraphs of the novel, the heroine states that although today there is some sense of social equality in regard to medical care as a resource and responsibility of the federal government, "medical care remains a competitive stakeholder industry." If you enjoy a bit of politics with your medical thrillers, this might be just the book you have been waiting to read!

Norig Ellison, MD

Professor Emeritus

Department of Anesthesiology & Critical Care

University of Pennsylvania

Philadelphia, Pennsylvania

vikingii@comcast.net

A Practical Approach to Anesthesia Equipment

Dorsch JA, Dorsch SE. Series Editor: Gravlee GP. Philadelphia: Wolters Kluwer/Lippincott Williams & Wilkins, 2011. ISBN-10: 0-7817-9867-1, ISBN-13: 978-0-7817-9867-9. 678 pages (paperback), \$78.00 (USD).

Understanding Anesthesia Equipment by Dorsch and Dorsch (now in its fifth edition) has long been considered the classic textbook on anesthesia equipment. Jerry and Susan Dorsch have prepared yet another important text, *A Practical Approach to Anesthesia Equipment*. In contrast to *Understanding Anesthesia Equipment* (which can be daunting for some clinicians because of its level of detail and the sheer volume of material covered in this comprehensive text), the new textbook is highly focused on practical and essential information every anesthesia practitioner needs to know to safely provide anesthesia care to their patients. Without trying to replace their original textbook, this new book provides the reader with up-to-date, accurate descriptions, diagrams, and clearly written explanations of many major types of anesthesia equipment. This new text is well organized, concisely written, and clinically relevant. Primarily targeted to trainees in anesthesia, and written largely from their perspective, this new text makes generous use of highlighted "Clinical Moments" that focus the reader's attention on specific details that are of particular importance, and have high practical value to the modern clinical practice of anesthesiology. Many, if not most, of these Clinical Moments represent the pearls that the Drs. Dorsch, Dorsch, and Gravlee have gleaned from their own many decades of practicing clinical anesthesiology.

After carefully selecting topics and materials that are highly relevant for practitioners of modern anesthesia, the editors have obviously spent many hours eliminating older material that over time has become primarily of historical

and/or theoretical value. Despite its streamlined presentation, this text maintains a level of detail sufficient to develop an understanding of the operational principles of the anesthetic equipment frequently used in current anesthesia practice. Also notable in this text is the generous use of full-color diagrams, illustrations, and photographs that cover a wide range of new and older anesthesia workstation platforms. These graphics make it easy for trainees and experienced anesthesia professionals alike to develop a clear understanding of their particular equipment's operating principles, as well as its strengths and weaknesses.

Covering topics ranging from medical gas systems and the anesthesia workstation, to monitors, ultrasound devices, and contemporary difficult airway management equipment, the book provides readers with a broad range of topics, and includes clear explanations of how their equipment works, how it is best used, and also many of the hazards and pitfalls that may be associated with the use of such equipment. The emphasis on equipment safety, including preuse checkout procedures, environmental safety (electrical, fire, and other safety hazards), and personal workplace safety adds a unique aspect to this textbook.

Because many newer anesthesia workstations are capable of advanced intensive care unit-style ventilation modes, and often are now equipped with displays that show the anesthesia provider real-time spirometry data, the authors spend a good amount of time explaining the clinical utility of this newer ventilation technology. The chapter on airway volumes, flows, and pressures goes from equipment to analyzing the implications for individual patients. One of the longer chapters in the book, this chapter uses 45 separate illustrations to teach the importance of incorporating these data into the everyday clinical management of patients in the operating room and intensive care unit.

One interesting addition to this book is the rather extensive discussion of anesthesia equipment preuse checkout procedures. As many experienced anesthesia care providers are well aware, much of the equipment they trained with has now been replaced with more modern versions. As a result, the equipment preuse checkout procedures that they learned previously may have undergone changes and now vary widely to accommodate the introduction of new anesthesia machine technologies (including advanced ventilators and machine self-tests, among others). Preuse checkout procedures remain an essential topic for anesthesiologists to understand and this new book covers these procedures for both classic anesthesia machines and the contemporary machines. Additionally, the text also includes an insightful presentation of the 2008 American Society of Anesthesiologists' Guidelines for Preanesthesia Checkout that replaced the previous 1993 Checkout recommendations that many may have learned during their clinical training.

In summary, Jerry and Susan Dorsch have made a major contribution to the anesthesia literature with this important textbook that combines a large amount of material into a succinct, concise, easily readable compendium. The book is broad enough to cover the majority of frequently used anesthesia equipment, and yet goes into sufficient depth for the average reader to develop a solid understanding of these important topics. It is difficult to take complex

equipment-related topics and present them in a way that makes them interesting and/or easy to read. Yet, these authors managed to achieve these goals in writing a text that maintains the reader's interest by using reasonably small chapters combined with a generous number of colored photographs and diagrams. This text is a "must read" for all trainees in anesthesiology, and will benefit more-experienced practitioners as a concise reference for their personal library.

Russell C. Brockwell, MD

*Anesthesia Associates of Naples, P.A.
Physicians Regional Medical Centers
Naples, Florida
Russell.Brockwell@hma.com*

Mayo Clinic Atlas of Regional Anesthesia and Ultrasound-Guided Nerve Block

J. R. Hebl and R. L. Lennon. New York: Oxford University Press, 2010. ISBN-10: 0199743037; ISBN-13: 978-0199743032. 488 pages, \$125.

An obvious question that arises with the publication of the new Mayo Clinic Atlas is, "Do we need another textbook of regional anesthesia?" The answer obviously depends on the goal of the text, and these authors have chosen a highly desirable target, especially in the view of the escalating role of ultrasound guidance in performing peripheral nerve blocks. Although there have been several "definitive" textbooks on regional anesthesia, as well as ultrasound manuals and practical guides published recently, these authors have attempted to fulfill the need for a book designed to be "a practical guide for residents in training and clinicians, but not intended to be a comprehensive or exhaustive review." The secondary goal of these authors was to provide an overview of ultrasound-guided regional anesthesia in this rapidly changing and expanding field.

This textbook offers a significant contribution to fill the existing gap in regional anesthesia using ultrasound technology, while still supporting the traditional techniques. The strong points of the book are the generous use of full-color anatomical illustrations, including visual descriptions of expected nerve stimulation responses and the practical visualizations of provider-patient positioning. The juxtapositions of anatomical drawings with the ultrasound images in each of the practical chapters are particularly valuable to the novice practitioner. This technique enhances the reader's understanding of ultrasound techniques, while emphasizing the importance of having a thorough knowledge of the anatomy. The basic introductory sections on neuroanatomy and ultrasound technology

are also helpful for the beginner. There is inevitable repetition of text and illustrations in the subsequent practical chapters, but this only serves to enhance the learning experience. The practical sections cover all of the peripheral nerve block techniques that would be of use to the resident-in-training or the practitioner with limited or no experience with ultrasound techniques. The depth of the discussion of the anatomy, positioning, and techniques, as well as ultrasound alternatives and complications, is appropriate for "the beginner." Although there is certainly room for a more "in-depth" discussion of these topics, this was clearly not the authors' primary objective in writing this text.

There are some shortcomings for a textbook of "regional anesthesia" (e.g., no discussion of spinal or epidural techniques). There are also the inevitable limitations of a multiauthored textbook despite the use of authors from the same anesthesia department. This text is the ultimate culmination of Denise Wedel's "recreation" of regional anesthesia at the Mayo Clinic (as mentioned in the foreword), and the consistency of both style and approach is evident in each of the chapters. This also creates a potential limitation in that the preferences reflect primarily the Mayo Clinic perspective. For example, in the chapter on "History," the authors describe the Mayo brothers' adventures with regional anesthesia before Halsted's, who was actually the first to experiment with regional anesthesia in the United States. Likewise, the chapter on local anesthetics does not mention the shorter-acting drug 2-chloroprocaine. There are other minor issues (e.g., the use of the ultrasound approach to obturator and paravertebral block are slighted). Despite the illustration of the sensory distribution of the medial antebrachial cutaneous nerve on the ulnar side of the forearm, the role of blockade of this nerve is not discussed.

In the end, however, these authors have achieved their goals in writing this textbook. They have produced a very readable introductory text that includes abundant illustrations of classical anatomy, block techniques, and new ultrasound techniques. Although there are other books and manuals with ultrasound blocks, the rapid changes occurring in this subspecialty make this publication a useful addition to the library of residents and anesthesia practitioners who are just now beginning to explore this new technology. Although the size and weight of this book do not make it easily portable to the operating room, beginners in the field of ultrasound-directed regional anesthesia will find it to be a very helpful approach to performing peripheral nerve blocks.

Michael F. Mulroy, MD

*Virginia Mason Medical Center
Seattle, WA
Michael.Mulroy@vmmc.org*