Book & New Media Reviews

Understanding Anesthesia Equipment, Fifth Edition

Jerry A. Dorsch, Susan E. Dorsch. Lippincott Williams & Wilkins, 5th edition, 2007, 1,056 pages. \$149.00 US. ISBN 978-0-7817-7603-5

It has been nine years since the publication of the last edition of this comprehensive classic tome on anesthesia equipment. The fifth edition, with its new and improved accompanying website, provides the anesthesiologist, anesthetist, respiratory therapist, and others, with a single source document to look for information and discussion of the pertinent issues related to the complete gamut of equipment, within the realm of anesthesia and respiratory care. This authoritative text serves both as a reference, and as a valuable study guide for examination purposes.

This latest edition of *Understanding Anesthesia Equipment* has been completely rewritten and updated. References to obsolete equipment, which appeared in the fourth edition, have been removed, the page size has been enlarged, and improvement in the text and formatting make the fifth edition easier to read. Hundreds of supporting pictures and illustrations aid in the explanation of often difficult concepts, within the narrative of the book. There are literally thousands of references to studies, reviews, case reports and other materials, that guide the reader to additional valuable and related sources of information.

There are new chapters dealing with suction equipment, latex allergies as related to equipment, lung isolation devices, and devices for managing difficult airways. The previous edition's chapter on laryngeal mask airways has been expanded, to include a discussion on the many new supraglottic airway devices that are now available on the market. A chapter on the implications and equipment requirements for use in close proximity to magnetic resonance imaging scanners, is now included. The chapter on "Temperature Control Equipment" not only provides information on the different devices and methods for patient warming, but also provides the physical and physiological rationale for their use.

A new chapter on operating room fires discusses the hazards associated with laser surgery, electrocautery and other sources of ignition, and strategies to minimize and mitigate this risk. The chapter on operating room design, found in earlier editions, has been omitted from this book. Other books, such as the "Guidelines for the Design and Construction of Hospital and Healthcare Facilities," from the American Institute of Architects Academy of Architecture for Health (published in 2006), and the Canadian Standards Association guidelines Z317.14 "Design and Construction of Canadian Health Care Facilities", to be published in 2010, are, and will be, better sources of information on operating room design.

At the end of each chapter, and on the accompanying website, the reader will find numerous pertinent questions that will aid in the understanding and study of anesthesia technology. The only detractor I found was that, in a few areas, the text provided excessive detail, and too many references, which tends to make the reading a little tedious at times. Additionally, some of the equipment presented in the book is either becoming dated, or it remains unavailable for use outside of the United States.

This book would be a welcome and necessary addition to each resident's collection of texts to be studied for fellowship and board examinations, and as a reference book for every Anesthesia Department, Respiratory Therapy Department, and Biomedical or Clinical Engineering Library. The Dorsch's have announced that this fifth edition will be their last. I sincerely thank Susan and Jerry Dorsch for their dedication, of over 33 years, to the enhancement of patient safety. Through their important literary contribution, they have provided students, engineers, and clinicians with a much better understanding of anesthesia equipment.

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