REVIEWS OF EDUCATIONAL MATERIAL

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The Pediatric Anesthesia Handbook. Edited by Charlotte Bell and Zeev N. Kain with Cindy Hughes as visiting editor. St. Louis, Mosby, 1997. Pages: 700. Price: $44.95.

This is the second edition of the *Pediatric Anesthesia Handbook* designed to provide a comprehensive review of the practice of anesthesia in children. It is another one in the series of practical handbooks published by Mosby. The text consists of 23 chapters divided in three main sections and also includes 6 appendixes. The two editors and the 19 contributors all practice at Yale University School of Medicine in the department of anesthesiology and in other departments. The editors preface that this new edition of the Handbook "has been expanded to reflect contemporary pediatric anesthesia practice." The book has been more completely cross-referenced to provide more information and avoid repetitions.

The first section is on perioperative general considerations. It consists of five chapters detailing from the preoperative evaluation to the emergency and recovery of the child. The chapters have been well written, in a concise, easy-to-understand format. Particularly excellent are the tables in the section on preoperative evaluation, especially those depicting common pediatric laboratory values. In the chapter on equipment and monitoring, the tables on modes of oxygen therapy are very useful because the information stated is thorough and hard to find in other "easy-access" textbooks. Also, more information has been included on the management of the difficult airway with a nice description of some of the airway "gadgets," including the laryngeal mask airway (LMA) and the Bullard laryngoscope. Perhaps a separate small chapter on induction of anesthesia with a table on induction agents would have been good to have in this section.

The second section, comprised of 11 chapters, is titled "clinical management." Each chapter is devoted to a particular organ system. One of the biggest assets of this handbook is the large amount of information (textbook-like) that has been included in this section in a concise, well-written manner. The authors should be commended for this. In particular, the chapters on pulmonary and congenital heart disease (CHD) are easy to follow and very thorough. The different pathophysiologic mechanisms in CHD are well explained, and the figures on the different operations for these children are very informative. They should be considered a must-read especially for nonpediatric practitioners.

The third section covers unique concerns in pediatric anesthesia in seven separate chapters. Old and current controversies in the field are well presented. A nice chapter on pediatric pain management is included. Unfortunately, not many pictures or figures were included in the description of peripheral nerve blocks. The chapter on ambulatory anesthesia has been rewritten to focus on unanticipated admissions. Ambulatory dilemmas, like the child with a runny nose and the age that "ex-preemies" are allowed for surgery and anesthesia are well covered in other areas of the handbook. The last chapter includes several tables on many pediatric syndromes and anesthetic implications. This will be very useful as a quick reference guide for practitioners.

Finally, the appendices cover an array of issues, including drug lists, pediatric resuscitation algorithms and drug dosages, excellent vascular access pictures, and the latest recommendations against bacterial endocarditis.

In summary, this is a well-written handbook with a vast amount of information. Every chapter is also well-referenced, including, in some cases, very recent publications. Many tables and figures make it easy to follow. Candidates about to take the anesthesiology boards should find it a welcome addition during their pediatric studies. The poetry and cartoons throughout the book are enjoyable and truly the work of talented artists. In regards to price, the value of the book clearly exceeds the stated price.

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Anesthesia and Obstetric Management of High Risk Pregnancy, Second Edition. By Sanjay Datta. St. Louis, Mosby Year Book Inc., 1996. Pages: 637. Price: $95.00

In the face of the seeming plethora of obstetric anesthesia texts currently available, it would seem difficult to find a niche for a new text. Dr. Datta has succeeded. Although at first glance *Anesthesia and Obstetric Management of the High Risk Pregnancy* would seem to be nearly another variation on theme, the editor's approach was refreshingly new.

As with many of the new textbooks that are currently available, this text is multiauthored with the inherent hazard of diverse backgrounds with the potential of producing uneven presentations and differing philosophies. For the most part, this did not happen. The style, contents, and presentations are remarkably consistent throughout the text, and the chapters are imminently readable.

Considering that each chapter was dually authored by an obstetric anesthesiologist and a second author representing a different specialty (usually obstetric), this outcome is even more remarkable. I found the dual specialty approach particularly valuable because the final product obviously represents obstetric and anesthetic view points. Obstetricians hoping to gain insight into obstetric anesthesia would find this text a valuable resource and perhaps more credible because of the obstetric input.

The scope of covered topics is relatively complete and in some regards innovative. Absent are the traditional chapters regarding physiology of pregnancy, pain pathways, uterine blood flow, and chapters dedicated to pharmacology. In their stead are topics that are not normally included in most texts. For example, sections on obstetric care of the patient with psychiatric disease, erythroblastosis fetalis, and anesthesia for intrauterine fetal manipulation were beneficial inclusions not frequently found in traditional texts.

Because the chapters regarding physiology are not included in the text, each chapter contains pertinent background information related to the chapter topic that provides enough information for decision making. In some instances, for those who are looking for a quick resource, background information may be deleted from the reading

without detrimental effects. For example, the Endocrine chapter contains an excellent introductory portion regarding hormones and target organs. However, this information may be of little value for those whose purpose for reading the chapter is the direct application of information to patient care. Therefore, this portion of the chapter may easily be passed over, and the reader may immediately proceed to obstetric and anesthetic management for the particular endocrine problem.

I also appreciated the editors' and authors' willingness to make specific recommendations regarding anesthetic management. No longer does a reader have to ferret through potential obstetric managements, the pros and cons of anesthetic managements, and then select an appropriate management plan. For those practitioners seeking a quick source, a plan is readily available. Finally, the text is the most comprehensively illustrated text I have read. Further, the illustrations and tables contain more than information. Rather, they frequently address decision-making. The chapter addressing fetal distress was complete with valuable and practical advice in tabular form. The tables presented in the Antepartum Hemorrhage and Hepatic Disorders section were also informative and practical. Other chapters I particularly appreciated dealt with The Febrile Patient and Intrauterine Fetal Death, and the chapter addressing diabetes was a superb problem-based chapter.

In summary, I believe this textbook is a valuable resource for those who practice obstetric anesthesia, whether they are the occasional providers of care seeking anesthetic plans or those practicing in a specialized obstetric unit who requires quick access to additional information for unusual problems. Dr. Datta—well done!

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Respiratory Physiology: People and Ideas. Edited by John B. West. New York, American Physiological Society, Oxford University Press, 1996. Pages: 431. Price: $85.00.

Did you know that oxygen was discovered in 1777 by the French scientist Antoine Laurent Lavoisier, who later died by guillotine during the French Revolution? Were you aware that many physiologists thought that combustion and tissue oxygenation were the same chemical process until Eduard Pflüger (1829–1910) showed that metabolism takes place in the peripheral tissues and the role of blood is to transport the oxygen and carbon dioxide? If you are a history buff or if you are interested in tracing the roots of modern pulmonary physiology, then *Respiratory Physiology: People and Ideas,* edited by John B. West, is the book for you.

This book is the fifth book of the American Physiological Society's *People and Ideas* series, which explores the historical development of discoveries in cardiovascular, renal, endocrine, membrane transport, and respiratory physiology. The 12 chapters of the *Respiratory Physiology* volume are organized into five sections that span the field of respiration physiology: Morphology, Gas Exchange and Blood Flow, Mechanics, Control of Ventilation, and Comparative Physiology. The book offers a unique historical perspective into advances in each of these areas from the vantage of the living "greats" in respiratory physiology. Chapters are written by prominent physiologists, including several known to anesthesiologists, such as Ewald R. Weibel (generations of the tracheobronchial tree), John B. West (gravitational model of pulmonary blood flow), John W. Severinghaus (blood gas analysis), Jere Mead and Peter T. Macklem (lung mechanics and respiratory muscle function), Norman C. Staub, Sr. (pulmonary edema formation), and John Widdicombe (respiratory reflexes). Some chapters review the historical background beginning in the days of Galen in 100–200 A.D. and extending until modern times. Others provide a more personal account of the author's discoveries and contributions to respiratory physiology in the 1940s–1970s.

Respiratory Physiology: People and Ideas vividly illustrates how old concepts and theories in physiology slowly change through history as advances in technology permit more in-depth study and gains in knowledge. The book shows the reader how much of the present research in respiratory physiology is a refinement of the "great era" of advances in respiration surrounding World War II, as more sophisticated techniques are used to address the same questions. The book also demonstrates the importance of whole-organ physiology in the past, present, and future. I only regret that each chapter did not contain a current picture of the author for posterity.

In summary, *Respiratory Physiology: People and Ideas* is a highly specialized book that is not for the average anesthesiology resident or practitioner. It is, however, a book of historical importance for general anesthesiologists who are history enthusiasts and academic anesthesiologists interested in respiratory physiology.

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