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Handbook for Stoelting's Anesthesia and Co-Existing Disease, 3rd Edition. Edited by Roberta L. Hines, M.D., and Katherine E. Marschall, M.D. Philadelphia, Saunders Elsevier, 2009. Pages: 510. Price: \$54.95.

This handbook accompanies the fifth edition of *Stoelting's Anesthesia and Co-Existing Disease*, containing the same topics and chapters as the main textbook. This format makes it easy to reference the textbook for more detailed information, while the handbook provides a concise, portable reference that is easy to use in the operating room. Written by 28 expert authors, the book is divided by organ system into 25 chapters.

Chapters 1–8 discuss ischemic heart disease, valvular heart disease, congenital heart disease, abnormalities of cardiac conduction and cardiac rhythm, systemic and pulmonary arterial hypertension, heart failure and cardiomyopathies, pericardial diseases and cardiac trauma, and vascular diseases. Major anesthetic considerations and hemodynamic goals are presented for patients with ischemic heart disease, stenotic and regurgitant valvular lesions, congenital heart disease, and rhythm abnormalities. A wide variety of vascular diseases, from abdominal aortic aneurysms to Takayasu's arteritis, Wegener's granulomatosis, and polyarteritis nodosa, are reviewed with several helpful tables that present signs, symptoms, and anesthetic considerations of these conditions.

The chapter on respiratory diseases, Chapter 9, includes helpful figures, such as both normal and abnormal spirometry and flow-volume curves, along with a review of the diagnostic and therapeutic considerations for both obstructive and restrictive lung diseases. Modes of mechanical ventilation and techniques for weaning from the ventilator are described in a concise, easy-to-read manner.

Chapter 10 is divided into three parts: diseases affecting the brain, spinal cord disorders, and diseases of the autonomic and peripheral nervous systems. Increased intracranial pressure, brain tumors, coma, brain death, cerebrovascular diseases, traumatic brain injury, and seizure disorders are discussed with a focus on anesthetic management. A section devoted to spinal cord disorders provides guidelines to the management of both acute and chronic spinal cord injury, including a section on autonomic hyperreflexia. Finally, autonomic disorders and peripheral neuropathies are discussed.

Chapters 11–22 are devoted to diseases of the liver and biliary tract; diseases of the gastrointestinal system; nutritional diseases and inborn errors of metabolism; renal diseases; fluid, electrolyte, and acid-base disorders; endocrine diseases; hematologic disorders; skin and musculoskeletal diseases; infectious diseases; cancer; diseases related to immune system dysfunction; and psychiatric diseases/substance abuse/drug overdose. Each chapter describes the most common diseases in each of these systems, along with their anesthetic considerations.

Chapter 23 discusses care of the obstetric patient, including the normal physiologic changes associated with pregnancy and options for obstetric anesthesia care. Complications, such as preeclampsia and obstetric hemorrhage, are reviewed, along with considerations for obstetric patients with coexisting medical diseases. Fetal assessment and common neonatal problems are discussed briefly.

Chapter 24 provides a relatively thorough review of pediatric anesthesiology with topics such as the physiologic differences between children and adults, guidelines for intraoperative fluid management and acceptable blood loss, and pharmacologic considerations in pediatric patients. Neonatal conditions, including respiratory distress syndrome, retinopathy of prematurity, congenital diaphragmatic hernia, tracheoesophageal fistula, omphalocele/gastroschisis, and pyloric stenosis, are reviewed with a focus on anesthetic management. Pediatric surgical conditions such as posterior fossa tumors, craniosynostosis, cleft lip/palate, mediastinal masses, and burn injuries are also discussed. In addition, there is an excellent review of malignant hyperthermia and masseter muscle rigidity, which incorporates several concise, easy-to-reference tables.

The final chapter of the handbook discusses geriatric disorders, with a helpful table describing the effects of aging on each organ system. Considerations for patients with both dementia and delirium are reviewed, as are ethical challenges in geriatric anesthesia.

Overall, this handbook is a compact, portable reference for questions and conditions most commonly encountered in anesthesia. One especially helpful feature of the book is the multitude of tables that present critical information in a concise format. These succinct tables quickly provide the anesthesiologist with the most important perioperative concerns and goals for patients with a wide variety of conditions. The handbook has been revised with current information, such as the recently updated guidelines for endocarditis prophylaxis. As a concise, easy-to-read handbook, this text is a valuable tool for experienced anesthesiologists, fellows, and residents to use in the operating room and preoperative clinic.

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(Accepted for publication July 2, 2009.)

Stewart's Textbook of Acid-Base. Edited by John A. Kellum, M.D., and Paul W. G. Elbers, M.D. London, United Kingdom, Lulu Enterprises, UK Ltd., 2009. Pages: 504. Price: \$88.13.

Stewart's Textbook of Acid-Base edited by John Kellum, M.D. and Paul Elbers, M.D., consists of a reprint from Dr. Peter Stewart's original text in 1981, *How to Understand Acid-Base*. This reprint provides Dr. Stewart's original concepts of the physicochemical and quantitative approach to acid-base physiology. The new text has 20 well-referenced chapters, written by authoritative authors in the field, that review the development of quantitative acid-base physiology over the last 20 yr.

In Stewart's approach, the strong ion difference $\{[Na^+] + [K^+] + [Ca^{++}] + [Mg^{++}] - [Cl^-] + [lactate^-]\}$, total weak acids (protein, phosphate etc.) and pCO_2 are seen as independent determinants of pH. In contrast, bicarbonate and protons are variable dependents in the physicochemical approach but play a central role in the classic approach.

This book is published by acidbase.org,* a Web site that over the past few years was the easiest way to read Stewart's original text (it is still available on the Web site). This Web site serves as an additional resource and includes useful clinical calculators that make analysis of even complex cases easy from a mathematical standpoint. In addition to serving as a calculator, the Web site can be used as an excellent teaching tool with its ability to graphically display acid-base analysis results and plot them over time.

Much has been written about the advantages and disadvantages of Stewart's approach *versus* the conventional bicarbonate-centered approach to acid-base physiology. The basic advantages of Stewart's approach are nicely summarized in this book's foreword, where emphasis is placed on the benefits of unifying acid-base physiology and electrolytes into one concept. This approach enables practitioners to gain a panoramic view of physiologic imbalances. It is especially useful for students of the field who struggle to achieve oversight while being taught to examine a complex interplay of systems in a disjointed way that never reveals the full picture.

This book serves as an excellent resource for all who are interested in acid-base physiology. It offers a depth of knowledge well beyond of what is necessary for daily practice. Ironically, it is so well referenced that it also will serve as a useful starting point for further reading in this field.

* www.acidbase.org/lulu.com. Accessed July 18, 2009.

The newly written part of this book is divided into two subsections. One subsection deals with more basic concepts, including advances in the understanding of the influence of weak acids such as proteins on pH, acid-base physiology in pregnancy, or intracellular pH. The other details the clinical applicability of Stewart's approach at the bedside and its use in understanding, among others, concepts of hyperchloremic and lactic acidosis, as well as the effect liver and renal failure have on acid-base homeostasis.

The authors were largely successful in continuing Stewart's clear style. They avoid losing the reader while going through a series of fairly complex calculations and formulas. Bedside applicability of a large number of chapters, especially when used in combination with the online calculator, is excellent.

The authors note their desire that this book enable readers to view the field more clearly, no matter what their primary approach. They base this desire on a change of perspective rather than requiring a restart of the prior controversy regarding the superiority of one approach to interpretation of acid-base physiology over another. Given the excellent resource this book offers, the quantitative physicochemical approach to one of the most common clinical problems becomes more practical. This, in turn, makes Stewart's Textbook of Acid-Base a useful stepping-stone for upgrading one's acid-base analysis from rule-of-thumb-driven to data-driven.

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(Accepted for publication July 20, 2009.)

A Practical Approach to Obstetric Anesthesia. Edited by Brenda A. Bucklin, M.D., David R. Gambling, M.D., and David Wlody, M.D. Philadelphia, Lippincott Williams & Wilkins, 2009. Pages: 546. Price: \$85.00.

Obstetric anesthesiology entails all of the usual general anesthetic concerns, plus an array of unique physiologic changes and disease entities that can be quite challenging to manage. With this text, there is a portable and current reference that provides a thorough, yet succinct, presentation of the salient information. *A Practical Approach to Obstetric Anesthesia* outlines the essential information for sound practice of evidence-based obstetric anesthesiology in an easy-to-read and well-referenced manner.

Initially, the perspective that this book is part of the familiar series of "A Practical Approach to . . ." somehow eluded me. As I began to read it though, I felt a likable familiarity to its style and readability that led to my "aha" moment. Being a recent residency graduate, I have relied on the cardiac book in this series a number of times. In that vein, this book is also on the mark.

An estimated two percent of parturients will have nonobstetric surgery during their pregnancy. For anesthesiologists who practice general anesthesia (outside of the obstetric suite) this book has a nice review of nonobstetric surgery during pregnancy that addresses not only intraoperative management, monitoring, and teratogenicity issues, but also pre- and postoperative management concerns.

In the obstetric suite, there is both labor analgesia and surgical anesthesia to consider. This not-so-subtle, yet often misunderstood distinction demands an understanding of the pharmacodynamics of local anesthetics and opioids, as well as the altered pharmacokinetics of the parturient. Here you will find an outline of local anesthetic properties and their implications in the parturient, as well as uteroplacental drug transfer considerations.

The general principles of labor, delivery, and postpartum issues, plus a multitude of disease states and disorders are described as they apply to both the mother and the fetus. One important entity that is not addressed is the impact of illicit drug use on obstetric

anesthetic practice. This "great pretender" must be considered in one's differential diagnosis for hypertension, and its life-threatening complications kept in mind when preparing for and administering anesthesia.

The onerous task of newborn resuscitation, usually provided by pediatricians, occasionally becomes the concern of obstetric anesthesiologists. Those in residency or who have recently finished training can also expect to see this material on the board exams. The algorithm, guidelines, and useful tables highlight a well-written chapter on this subject.

Anyone who has had the pleasure of reading any of the other "Practical Approach" books will understand my endorsement of this book as well. For those who have not, it is time for you to discover its value in your library. *A Practical Approach to Obstetric Anesthesia* is a certain asset and addition to the other helpful books in this series. Although the larger texts cannot be replaced by it, as an obstetric anesthesiology attending at a tertiary care teaching institution I will be endorsing this book to our residents to supplement their study of obstetric anesthesiology.

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(Accepted for publication June 8, 2009.)

The Ether Monument: A Story of Beauty and Controversy. By Rafael Ortega, M.D. Park Ridge, Illinois, Wood Library-Museum of Anesthesiology, 2009. Approximate running time: 22 minutes. Price: \$27.50.

Most anesthesiologists who remember their history know that the first public demonstration of ether anesthesia occurred in Boston, Massachusetts on October 16, 1846. They might even remember that the location was the Ether Dome at Massachusetts General Hospital, and that Dr. William T. G. Morton (1819–1868) administered the ether. But few will know the history of The Ether Monument that commemorates this event. Rafael Ortega, M.D., Professor of Anesthesiology at the Boston Medical Center, in collaboration with the Wood Library-Museum of Anesthesiology, Park Ridge, Illinois, has worked to rectify our ignorance by making this DVD. This presentation is based on his 2006 book *Written in Granite: An Illustrated History of the Ether Monument*, the sales of which have provided a source of maintenance funding for the monument.

On March 13, 1866, Mr. Thomas Lee (1779–1867) informed the city government of Boston that "I propose to erect and present to the city a monument in the form of a fountain, as an expression of gratitude for the relief of human suffering occasioned by the discovery of the anesthetic properties of sulfuric ether." Work began on the monument in 1867, and on June 27, 1868, it was completed and presented to the city.

The Ether Monument: A Story of Beauty and Controversy is an excellent 22-min introduction in a DVD format into the history of ether anesthesia and of the Ether Monument. The narrator states that the discovery of ether anesthesia was "one of the most important events in the history of medicine." It would be no exaggeration to state that the alleviation of pain during surgery was one of the most important events in the history of mankind. This one simple act has allowed the treatment of a myriad of surgical and medical conditions, and has brought cure and relief to countless millions of patients.

Salient individuals involved in the discovery of anesthesia controversy are mentioned: Crawford Long (1815–1878), Horace Wells (1815–1848), Charles Jackson (1805–1880), and William T.G. Morton. All have monuments or commemoratives erected in their honor as the "discoverer of anesthesia." But it was the event in Boston on October 16, 1846, where the first public demonstration of ether anesthesia occurred that would change all of medicine and surgery. What is striking about the Ether Monument is that it does not mention any