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Near Misses in Pediatric Anesthesia, Second Edition. Edited by John G. Brock-Utne, M.D. New York, Springer, 2013. Pages: 280. Price: $74.99.

The second edition of *Near Misses in Pediatric Anesthesia* has been significantly expanded to include almost twice as many cases as the first edition. Otherwise, the format remains largely unchanged: 87 cases are presented in no particular order with a brief vignette followed by clinical questions, case solution and discussion, and—for most cases—a short reference list of either case reports or other pertinent suggested reading. The case presentations are short and succinct, averaging between two and four pages in length. This format makes for very easy reading and should be popular with trainees and junior staff who want to supplement their training or experience with a variety of interesting cases described by an accomplished clinician and teacher.

From the perspectives of not only a trainee but also a teacher, this book provides an interesting compilation of pearls in the diagnosis and management of both commonly occurring pediatric cases (foreign bodies, laryngospasm, and difficult intubations) and zebra cases (missed congenital tracheoesophageal fistula in a 7-yr-old with chronic aspiration masking as asthma and complete airway obstruction from uvulitis), and they certainly are testament to the author's considerable clinical experience.

After reading through this case compilation, however, we found ourselves wondering whether we were truly reading a book intended for trainees and practitioners in 2014: Bain circuits were used for intraoperative ventilation, thiopental was still available as an induction agent, atropine was routinely administered even to a 3-yr-old, halothane was still popular, and elective anesthetics were induced *via* a butterfly needle. Although certainly interesting and not without educational merit, we fear that such historic cases along with rather dated reference material are of somewhat limited interest to today's learner and may actually prove distracting due to unfamiliar drugs and techniques. This compilation also contains more than 30 cases of patients aged 14 to 19 yr, who certainly present with anesthetic issues, but they are not uniquely *pediatric* in their challenges. In addition, a substantial number of cases center on equipment malfunctions, for example, faulty gas analyzer, stuck valves, and crossover of gas supply pipelines, and likewise, does not present *pediatric* problems *per se* but rather concerns patients of all ages. In the end, the reader is left with approximately 40 cases of truly pediatric near misses.

Although any anesthesia provider will agree that there are usually several ways to successfully tackle a difficult situation in the operating room, some of the case resolutions and recommendations made us scratch our heads. In the light of the medico-legal realities of 2014, we would have to respectfully disagree with the author on some of his case solutions: Should we really proceed with a semi-elective appendectomy at a—presumably—small hospital in a patient with complete congenital heart block in the absence of a transvenous pacing option, solely relying on isoproterenol and transcutaneous pacing as our back-up? Should a blind nasal intubation be our first choice in airway management for a decompensating asthmatic child in the emergency room? Should we prepare for a patient with suspected airway difficulties for gastrointestinal endoscopy by asking the endoscopist to load an endotracheal tube onto their smallest gastroscope instead of setting up for video-laryngoscopy or fiberoptic intubation back-up? In the absence of extenuating circumstances, we are concerned that these anesthetic management strategies might prove difficult to defend in case of a poor patient outcome. From a teaching perspective, the above-mentioned cases are all excellent starting points for discussions with trainees, but we would want to discourage the described management plans if they were professed by our residents. At the least, these cases would have warranted a somewhat broader discussion of management options to provide the reader with some perspective.

In summary, this book presents an interesting variety of challenging cases and will be of value to any anesthesia trainee and teacher. Any potential reader looking specifically for *pediatric* anesthesia case vignettes, however, is likely going to be disappointed because too few of the included cases truly present *pediatric* anesthetic challenges.

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Liver Anesthesiology and Critical Care Medicine. Edited by Gebhard Wagener, M.D. New York, Springer, 2012. Pages: 473. Price: $209.00 (hardcover), $159.99 (e-book).

Perioperative care for the patient with liver disease, especially end-stage liver disease, remains one of the biggest challenges for anesthesiologists. They are involved in all aspects of patient care, from addressing physiologic sequelae associated with end-stage liver disease through transplantation to postoperative intensive care.

Gebhard Wagener has compiled *Liver Anesthesiology and Critical Care Medicine*—now the definitive resource for anesthesiologists and critical care physicians who provide perioperative care for the patient with liver disease. Given the breadth of this topic, the fact that it has been accomplished in only 473 pages is impressive. Chapters are written by 74

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experts from nine countries, including the United States, United Kingdom, Germany, China, and Saudi Arabia.

The book is divided into five major sections. The first provides a review of the physiology, pathophysiology, and pharmacology of liver disease. The authors provide a comprehensive review of the major organ systems involved and distinguish between acute and chronic liver failure. This section also provides an excellent explanation of liver anatomy, complete with gross and histological illustrations.

All-important to the anesthesiologist are the effects of various disease states on drug metabolism. Given the role the liver plays in metabolism and excretion of drugs, the authors provide a concise overview of the pharmacokinetic and pharmacodynamic changes that occur in liver disease. Specific classes of drugs relevant to anesthesiologists are also reviewed.

The second, and largest, section of the book is dedicated to anesthesiology for liver transplantation. Helping us keep in mind the advances that have been made since Starzl performed the first liver transplant in 1963, the book provides a history of liver transplantation. Providing a global view in line with the international diversity of the authors' origins, the European and American perspectives on recipient and donor selection are reviewed.

Given that no two surgeons and no two liver transplants are the same, the various surgical techniques, necessary monitors, and transfusion strategies are reviewed. In the absence of a "best-practice" approach to liver transplantation, each center has its own protocols and approach to liver transplantation. In this section, the authors provide the reader exposure to the full range of existing practices. In addition, special chapters are dedicated to pediatric liver transplantation, combined organ transplantation, and transplantation in those patients with a high Model for End-Stage Liver Disease score.

The authors summarize the hemodynamic changes that occur during the various phases of liver transplantation and present the hemodynamic goals associated with each phase. Strategies to achieve these goals are discussed and included a review of necessary monitors and pharmacologic options to help achieve the desired results.

Many chapters begin with a brief history and epidemiology of liver transplantation, making it obvious that each chapter is written by a different author. This, however, allows each chapter to stand on its own merit as a quick reference for interested individuals.

The third section focuses on anesthesiology for liver surgery. Although anesthesia for liver transplantation is increasingly being performed by dedicated transplant anesthesiology teams, anesthesia for liver surgery may be delivered by any number of generalists. The focus of this section is on indications, techniques, anesthetic management, and intraoperative complications of hepatobiliary surgery. Here, a practical, simple approach to patients is presented with suggested anesthetic regimens.

This section next highlights the fact that advances in medical therapy are now allowing patients with liver disease to live longer and lead more functional lives. As a result, patients with liver disease are also presenting for nonhepatic surgery. This section reiterates many of the physiologic changes of liver disease and urges the reader to consider the effect of individual surgical procedures and anesthetic management can have on the progression of liver disease.

The fourth section provides a high-level overview of the postoperative intensive care of the liver transplant patient. A system-based approach is taken, looking at the goals and implications of the derangements seen after transplantation. Since the invention of cyclosporine, many new therapies are used to prevent rejection. The authors provide a review of the various immunosuppressive drugs used. Not only do the authors review the basic immunological targets of these drugs, but they also remind us of their potential systemic adverse effects. Graft failure, acute respiratory distress syndrome, acute kidney injury, and sepsis are also addressed in individual chapters. These chapters provide a brief look at these issues and aspects of them unique to the liver transplant patient. However, these chapters do not provide the in-depth knowledge needed to manage these pathologies in the intensive care unit.

The final section of the book addresses the unique concerns associated with the patient undergoing hepatobiliary surgery. Included in this is the care of the living donor after hepatectomy. Given the complexity of these operations, complications are bound to occur and often these patients return to the operating room or procedural suite for further intervention. The recognition of complications is paramount in caring for these patients, and the authors provide a brief overview of the potential complications and management.

This book aims to cover the incredibly broad and challenging field of liver anesthesiology and critical care. The figures in the book are helpful, although the text in many of the tables and figures were difficult to read, and thus understand, due to printing issues. There is some repetition of material among chapters, but appropriately so. All the chapters have been extensively researched and the material presented is supported by data, with references provided at the end of each chapter.

As a liver anesthesiologist and critical care physician, I think this book provides the material in an organized, readable format that will appeal to anesthesiologists and trainees at all levels as both a primary text and a reference book. This book has filled a void that has existed for those wanting a reference dedicated to caring for the patient with hepatic disease. Given that it is the first of its kind, this book is poised to become the authoritative resource for liver anesthesiologists, fellows, and residents who want an in-depth review of all aspects of perioperative care for the patient with liver disease.

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