

Michael J. Avram, Ph.D., Editor

Case Studies in Pediatric Critical Care. Edited by Peter J. Murray, M.B., Ch.B., D.A., F.R.C.A., Stephen C. Marriage, F.R.C.P., and Peter J. Davis, M.D., F.A.A.P. Cambridge, United Kingdom, Cambridge University Press, 2009. Pages: 335. Price: \$70.00.

As the old saying goes, "there is no substitute for experience." This is certainly true in the specialized field of pediatric critical care, where the clinical reasoning and management skills characteristic of an expert intensivist are the product of extensive experience overlaid on a strong grounding in physiology, pharmacology, and evidence-based medicine. *Case Studies in Pediatric Critical Care*, with its concise, practically oriented chapters, provides the intensivist-in-training (or practicing intensivist) with expert insight into the diagnosis and management of a variety of important problems in pediatric critical care.

Each of the book's 27 chapters, written by an international group of experts, leads with a brief introduction, followed by a case history detailing the presentation, symptomatology, results of investigations, decision-making approaches, and management of the patient in the intensive care unit and beyond. The case mix strikes a good balance between pathologies that are common (e.g., respiratory syncytial virus bronchiolitis, diabetic ketoacidosis, and sepsis in the bone marrow transplant recipient) and unusual (e.g., dengue hemorrhagic fever, management of the patient with a failing Fontan repair, and refractory narrow complex tachycardia in infancy). Each case presentation is followed by a discussion of the approach to workup and management (which includes perioperative considerations for surgical cases), a brief conclusion, a list of essential learning points, and key references.

What distinguishes this book is its reader-friendly format and a consistent emphasis on imparting practical knowledge in the context of examples and evidence. Because the authors clearly explain the rationale for their management decisions (e.g., for transfusion, choice of ventilator settings, or the decision to institute and later withdraw extracorporeal membrane oxygenation), each case history creates a memorable, vivid example to help guide the reader's own decision-making. The discussion sections bolster this framework for decision-making with epidemiologic data, information about prognostic factors, and succinct summaries of recent evidence. Another unique feature of this book is the longitudinal perspective imparted by following the course of each critically ill child from intensive care unit admission through discharge, and sometimes for several months thereafter. This perspective provides a more realistic view of the "highs and lows" that often characterize the course of recovery from critical illness.

One suggestion for the next edition would be to present the cases in a logical progression, perhaps organized by primary organ system dysfunction (e.g., the five cases involving management of patients with congenital heart disease might be grouped together), with greater coordination of content across chapters. Another suggestion would be to minimize the overlap between cases, such as that in Chapter 11, "Critical Care for a Child with 80% Burns," and that in Chapter 23, "The Child with Thermal Injury and Smoke Inhalation," by consolidating information relevant to both cases in an appendix or in a shared introductory section. Similarly, some repetition of topics and tables presented in both Chapter 5, "Child with a Head Injury," and Chapter 24, "A Child with Multiple Trauma," could be eliminated. Overall, the book makes excellent use of figures and tables, but several chapters could benefit from greater use of graphics to highlight salient aspects of the case, pathophysiology, workup, and management. Finally, the scope of each chapter could be more uniform because the discussion sections (most of which run approximately 5 pages) range from 3 to 14 pages. These relatively minor suggestions do not significantly diminish the overall quality of the book.

Overall, this text offers the reader a strong framework for approaching the complex diagnostic, therapeutic, and even ethical challenges in pediatric critical care. It is refreshing to read a text that is so accessible and so deftly addresses the technical and humanistic challenges of caring for critically ill children. *Case Studies in Pediatric Critical Care* is an excellent resource for the intensivist-in-training, as well as for the fully trained practitioner interested in viewing the management of important intensive care unit problems from the vantage point of well-constructed case studies.

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Case-based Anesthesia: Clinical Learning Guides.

Edited by George Shorten, Stephen F. Dierdorf, M.D., Gabriella Iohom, M.D., Ph.D., Christopher J. O'Connor, M.D., and Charles W. Hogue, Jr., M.D. Philadelphia, Wolters Kluwer-Lippincott Williams & Wilkins, 2009. Pages: 237. Price: \$99.00.

The authors of *Cased-based Anesthesia: Clinical Learning Guides* have aimed to produce a text that is unique among the

voluminous and diverse selection of clinically oriented books now available. *Case-based Anesthesia* is most singular in its structure and format, amalgamating some of the most effective elements of question-answer based texts, such as *Anesthesiology: Problem Oriented Patient Management* (Yao, FS, Lippincott Williams & Wilkins), while incorporating the brevity and readability of review books, as exemplified by *Anesthesiology Review* (Faust, RJ, Churchill Livingstone). *Case-based Anesthesia* does not intend to have comprehensive scope, nor does it brand itself as an exhaustive review book for board certification. Each of its 60 chapters is approximately four pages long and begins with a case presentation, succeeded by open-ended questions and their attendant discussion, often thoughtfully using graphs, tables, and images. Each case-based chapter follows one of two formats: “step-by-step” chapters lead the reader through a clinical scenario prospectively, whereas subjects configured into a “reflection” framework observe the topic retrospectively. The chapters conclude with a Key Messages list of bullet points summarizing the salient themes of the subject followed by three self-study questions with answers.

Several elements of *Case-based Anesthesia* are noteworthy. Most importantly, it is a genuinely readable text because of the concise and cogent discussions of each topic. Although the succinct treatment of the subject matter prohibits the discussion from achieving its conceivable depths to some degree, this is largely compensated for by a robust chapter reference section composed of citations germane to the topic at hand. The majority of cited references in each chapter are from within 5 yr of the publication date, but the authors did not exclude “classic” articles essential to the bibliography. The book itself encompasses admirable latitudes of clinical practice, recognizing important issues within every subspecialty of clinical anesthesiology while also keeping the reader abreast of several “hot topics.” Examples of the latter include “Emergency Reversal of Rocuronium-induced Neuromuscular Blockade Using Sugammadex” and “Levosimendan and Acute Heart Failure.”

Three elements of *Case-based Anesthesia* potentially detract from its utility. The methodology employed by the editors in selecting the various discussion topics is not readily apparent. Indeed, core topics such as perioperative hypertension and anaphylaxis share as much equivalent literary real estate as mitochondrial disease and occupational exposure to anesthetics. In addition, the chapters are not organized in a sequence relating to their subspecialty or temporal placement in the perianesthetic care of patients. This makes locating subject matter cumbersome. Finally, although the writing and editing of the primary content are superb, the concluding self-test questions are inconsistent with respect to degree of difficulty. Some require little to no critical thinking for the junior trainee, others are written with a fastidious attention to detail that may at times fail to underscore the key concepts.

Cased-based Anesthesia: Clinical Learning Guides is altogether a welcoming text that should play an adjunctive role in one’s library. It does not discriminate among its audience with respect to experience and training. It may, therefore, be useful to the junior-most trainee and to the seasoned authority alike. A most productive use of its contents will entail a focused attempt to answer the open-ended questions before reading the discussion. This may be particularly useful for clinicians preparing for oral board examination. Lastly, the young physician-educator may find himself/herself in need of a basic construct and content for intraoperative teaching. They should expect a thoroughly functional gain from having this text handy for “on the spot” didactics. In summary, *Cased-based Anesthesia: Clinical Learning Guides* may not yet deserve cardinal shelf space in one’s bibliographic arsenal, but those who seek a departure from the density of conventional clinically oriented textbooks in favor of invitingly readable content should expect to be thoroughly satisfied.

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