

Critical Care Medicine: The Essentials, 3rd edition. John J Marini MD and Arthur P Wheeler MD. Philadelphia: Wolters Kluwer/Lippincott Williams & Wilkins. 2006. Soft cover, illustrated, 664 pages, \$59.95.

This is the third edition of this title, which aims to provide a concise overview of critical care medicine that incorporates evidence-based recent advances in the field with the basics of underlying pathophysiological mechanisms. The book was written entirely by the 2 authors, both of whom are intensivists with extensive investigational, educational, and practical clinical experience. The target audience is explicitly declared to be advanced residents and clinical fellows, though valuable information is also included for seasoned intensive care unit (ICU) clinicians, hospitalists, nurses, students, and allied health professionals. The book has an attractive yellow soft cover and is of medium size. Typographical errors are rare. Clear graphics illustrate key points, but there are no photographs or radiographs. The thorough index is followed by 2 removable inserts that summarize dosing information on common ICU medications.

The book is organized into 3 broad sections: "Techniques and Methods in Critical Care," "Medical Crises," and "Surgical Crises." Though the reasoning for this organization is understandable, complete understanding from a systems-based approach will require readers to obtain information from various sections of the book. Each chapter includes subsections and is concluded by an excellent "Key Points" overview. Selected readings are suggested at the end of each chapter; the majority of the selections are review articles, and a few randomized-controlled trials are included.

The first section, "Techniques and Methods in Critical Care," has 19 chapters, with a broad range of topics. The first 4 chapters deal with cardiac hemodynamics and resuscitation. From a fellow's perspective, these chapters present a good overview of physiological mechanisms of hemodynamic failure; however, most general practitioners will find the discussion tedious and perhaps better served in a textbook dedicated to physiology. A thorough and educational section on Swan-Ganz catheters is included and

should be read by all clinicians who use vascular catheters for clinical management. Perhaps a more thorough discussion of both the positive and negative outcomes data on Swan-Ganz catheters would have been appropriate.

Chapters 5 through 10 give a thorough review of respiratory mechanics and respiratory failure, and they include extensive discussions on mechanical ventilation. Once again, the amount of physiology in this section will be a bit overwhelming to the general practitioner, but 2 well-written chapters on practical problems with mechanical ventilation and weaning provide a strong clinical application of the material.

Chapter 11, on ICU imaging, severely lacks from the dearth of radiographic images to illustrate the text. Several rudimentary hand-drawn illustrations detract from the overall quality of the book.

The next several chapters include a relatively basic but good review of acid-base and electrolyte disorders, followed by a chapter on transfusion therapy, which includes an excellent discussion on indications for red-cell transfusion; however, this chapter lacks information on recent exciting data on the clinical use of recombinant factor VII.

The remaining chapters of Section 1 cover a wide spectrum of topics, including pharmacokinetics, nutrition, analgesia, general supportive care, and even an interesting chapter on cost control. These topics seem erratic in their organization. Of particular note is the chapter on general supportive care, which includes topics such as respiratory care, that would have been better served in other chapters. Also, given the importance of end-of-life care, hospice, and ethical issues in the ICU, a chapter on these topics would have lent itself well to this comprehensive review book.

Whereas Section 1 at times became bogged down in physiological concepts and random topics, Section 2, "Medical Crises," is concise and maintains a high clinical importance. For most practitioners, Sections 2 and 3 will provide the most educational and pertinent value. Chapters 20 and 21, on cardiopulmonary arrest and acute coronary syndromes, are well-written and include very useful tables on common clinical scenarios

and treatment algorithm flow diagrams. Chapter 23, on thromboembolic disease, includes a useful discussion of the pros and cons of ventilation-perfusion scans versus helical computed tomograms for diagnosing pulmonary emboli. Again, a flow diagram of diagnostic strategies is included, though a more thorough discussion of determining pretest likelihoods could be useful. Chapters 24 through 27 return to the core of critical care in discussing hypoxic respiratory failure, acute respiratory distress syndrome, ventilatory failure, infections, and severe sepsis. Unfortunately, in the section on acute respiratory distress syndrome, for example, the reader may again be distracted by the crude radiographic hand drawings, which detract from an otherwise excellent chapter. Chapter 27, on severe sepsis, is very well written and includes discussions on recent advances regarding early fluid resuscitation, relative adrenal insufficiency, activated protein C, and tight glucose control.

The chapters that conclude Section 2 include coverage of thermal disorders, renal and liver failure, bleeding disorders, endocrine emergencies, and drug overdoses. These chapters are well written but might have benefited from a few more treatment algorithms and tables, as opposed to being all text. For example, a treatment flow diagram for diabetic ketoacidosis and hyperosmolar-nonketotic coma would have added some punch to what are mostly all-text chapters.

Section 3, on surgical crises, begins with a chapter on coma, stroke, seizures, and brain death. Though this chapter is well written and informative, it feels out of place in the surgical crises section, as most of the content is nonsurgical. Chapters 35 and 36, on the management of head, spine, and thoracic trauma, give very useful information not typically encountered in most internal medicine textbooks. The book concludes with brief but concise overviews of the acute abdomen, pancreatitis, and gastrointestinal bleeding.

The goal of boiling down all of intensive care medicine to a single book is certainly a challenging one. **Critical Care Medicine: The Essentials** is an admirable effort to bring critical care to its target audience.

Those looking for a broad overview will gain much by reading this book. However, for some readers in search of a pure clinical textbook, the amount of physiology in this book may be overwhelming. Also, this book does at times suffer from erratic organization and crude radiographic drawings that detract from an otherwise well constructed product.

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Handbook of ICU Therapy, 2nd edition. Ian McConachie FRCA, editor. Cambridge, United Kingdom: Cambridge University Press. 2006. Soft cover, 439 pages, \$60.

The intensive care unit (ICU) is one of the busiest and most demanding environments in the hospital. It is also one of the most difficult work environments in which to stay abreast of current literature and best practice techniques. For junior health-care professionals and those who are not accustomed to it, the ICU environment can be very intimidating. A well designed, easily accessible text that can update a busy clinician on recent developments in the field and one that could make the working environment of the ICU more accessible to trainees and consultant health-care professionals is very desirable.

The **Handbook of ICU Therapy**, 2nd edition, in many ways, is such a text. At its core, the book provides a broad discussion of the basics of ICU care, including excellent review chapters on the physiology of acute illness, mechanical ventilation, shock states, and fluid and electrolyte management. It presents many newer concepts in the field, including issues related to anemia and blood transfusion, noninvasive ventilation, and renal replacement therapy. Its most distinguishing features, however, are detailed chapters about specific patient populations encountered in the ICU: the post-surgical patient, the septic patient, the patient with acute lung injury or acute respiratory distress syndrome, and the patient with cardiac dysfunction, to name a few. The book has been extensively updated and substantially

expanded from the first edition, published in 1998.

The book is probably best suited for the physician-in-training seeking a more in-depth understanding of critical-care management issues, the critical-care nurse seeking information on current developments in ICU care, the respiratory therapist seeking a more in-depth understanding of patient care, the physician consultant who feels intimidated entering the ICU and desires a basic understanding of the ICU environment, or the intensivist who needs an overview of a particular topic prior to a more in-depth review of it.

Although meant to be a "ready reference" for the busy practitioner, this handbook finds itself caught between being a true "pocket reference" and a full fledged textbook. Perhaps it fills a niche for readers who do not want to delve into a full textbook of critical care but prefer more detail than the average ready reference. It identifies various controversies in critical care, such as the use of the pulmonary artery catheter, blood transfusion therapy, noninvasive positive-pressure ventilation, alternative ventilation modes, and withholding and withdrawing care, but unfortunately these are either presented in too much detail for a handbook (eg, blood transfusion therapy and withholding/withdrawing care) or in not enough detail to adequately cover the controversy (eg, pulmonary artery catheter, blood transfusion, noninvasive ventilation, and alternative ventilation modes).

The book is organized into 2 parts. Part 1 covers basic principles of critical care. Part 2 covers specific problems encountered in the ICU. There are 30 chapters, 9 of which are entirely new to this edition, and 3 of which were previously covered within a single chapter (the one on patients with cardiac dysfunction). There is an 11-page index that is accurate and makes topics easy to find. Although it reviews the current literature well, the book draws heavily on evidence in anesthesiology and surgical references.

Part 1 reviews many of the basic concepts of ICU care and discusses many of the most current practices in ICU care. Part 2 is the stronger portion of the book. It is written from a distinctly British viewpoint. Many of the evidence-based discussions in this book are applicable to countries on both sides of the Atlantic; however, discussions about the application of the data are, in many instances, clearly British or European. This aspect of the text should be kept in mind if

one intends to apply its guidance in the United States. For example, a drug such as dopexamine, emphasized in this book for use in the care of surgical patients and as a vasopressor, is not available in the United States. There are also several British/European acronyms not used in the United States (eg, "U&E" for urea and electrolytes, "HDU" for high density unit).

Each chapter is organized into an introduction (most with chapter objectives), the chapter body, a list of references, and a "Further Reading" section, rich in "high-yield" recent publications that should be considered required reading for most intensive care specialists. Unfortunately, this handbook has few tables, graphs, or figures to clarify or stress important concepts; this paucity is a notable drawback. I also thought that a few chapters were notably missing from an ICU handbook. In particular, there are no discussions on airway management, acid-base disorders, thromboembolism, cerebrovascular disease, toxicology, immunosuppression, or pregnancy. The chapter that includes an in-depth discussion on withholding and withdrawing care, although excellent, seemed to me misplaced in a handbook reference.

The chapters on sedation, analgesia, and neuromuscular blockade, continuous renal replacement therapy, sepsis, and acute lung injury and acute respiratory distress syndrome are all outstanding review chapters that are well referenced and useful to the bedside clinician.

The chapter on the surgical patient in the ICU and the trauma patient were too in-depth to be a useful as a quick reference and both were distinctly British (eg, commenting on the use of bed rest in preoperative optimization of pulmonary status, and emphasizing the differences between the trauma patient populations—more penetrating wounds in the United States vs more blunt trauma in the United Kingdom). The chapter on congestive heart failure dealt mostly with the management of out-patients and had little applicability to the ICU patient in acute decompensated heart failure or cardiogenic shock. The chapter on gastrointestinal problems was poorly organized; it was a broad overview of too many topics, without sufficient depth or clinical utility in most of them.

Overall I found the book a useful review of the basics of ICU care for the readership previously mentioned. I would not recommend it to most board-certified intensivists or other physicians actively engaged in the