

Oxford Handbook of Acute Medicine, 2nd edition. Punit S Ramrakha and Kevin P Moore. Oxford, United Kingdom: Oxford University Press. 2004. Soft cover, illustrated, 990 pages, \$36.50.

Medical students, fresh out of the classroom and on the wards for the first time, are in a unique position. They have acquired a vast array of facts on physiology, pathology, and pharmacology, but they do not have the necessary skills to organize this information around an individual patient's distinct medical problems. The student's medical knowledge is like the room of a messy teenager with wealthy parents: they have plenty of wonderful stuff, but it is strewn all over the place. It is not until adulthood that they understand the value of coat hangers, drawers, and the trash can. Similarly, it is not until medical students get out to the wards that they begin to develop the ability to tie disparate facts together in the service of the patient. Practicing physicians often forget that it takes practice to put diverse pieces of patient information into a neat package of diagnosis, course of disease, and treatment.

Newly minted physicians are further along this road of synthesis but now have a new constraint they did not have to face as medical students: time. Residents need quick access to accurate and "detailed-enough" information. When the senior resident calls to say he will be admitting a patient with acute coronary syndrome, the junior resident needs to refresh her or his knowledge base regarding what questions are most pertinent to ask the patient, which aspects of the physical examination to emphasize, which laboratory and diagnostic tests to order, treatment options, and possible complications. If this information cannot be readily accessed and sorted through, it may as well not be available at all.

Faced with these demands, medical students and residents often go in search of a "coat-pocket" book that will make life easier on the medicine wards. Students need a book that helps them organize their knowledge into manageable, problem-focused packets. Residents have already begun this organization but need quick access to thorough, but brief and to-the-point details.

The Oxford Handbook of Acute Medicine is a good introduction for that audience, about the day-to-day issues of hospi-

tal-based medicine. It is thorough, well-written, timely, and suited for budding physicians and those at the beginning of their careers. Most importantly, it is small enough to fit in the ubiquitous white coat without causing an undue amount of back pain or slowing the holder on his or her way to a code.

There are several of these coat-pocket books available that aim to accomplish this task, and this book does the job well. It is well organized around common medical problems encountered in the hospital. Its sections are grouped mainly by organ system, which makes the information easy to find at a glance. The topics are organized by acuteness and frequency of problems seen by a busy medicine intern. It begins with cardiovascular disease and starts with information that needs to be the easiest to find: that is, adult life support. By placing it front and center, the authors are emphasizing that this will be a book about practicalities. It is not intended to be a dusty tome that one consults when one has the luxury of time. Rather, they intend for it to become dog-eared from frequent use. It is meant to be glanced at while running down the hall to a code, to remind the reader of the causes of pulseless electrical activity.

Organizing the book into sections based on acuteness is both unique and very useful. Obviously, information that needs to be recalled quickly needs to be found fast, and in general, that is how this handbook works. What better way than to place it than at the beginning? Other authors of similar books should pay attention to this format, as it is very intuitive. Of course, one could argue with the specifics of what are the most frequent and acute problems seen in hospital medicine. For instance, the authors place "fever in a traveler" before "necrotizing fasciitis." For the majority of the topics discussed, however, the organizational scheme makes sense and is easy to find.

Organizing sections by organ system is also intuitive. Once again, one could argue about the placement of each section, but the authors' choice for **The Oxford Handbook of Acute Medicine** works well. One potential problem with this organ-system scheme is that a patient seldom presents complaining of pneumonia. Rather, they present with shortness of breath, cough, and fever. I have

never found an organization format delineated by complaints to be as useful as that employed by this book, but it can be helpful to have an introductory section that lays out frequent patient complaints and laboratory abnormalities with the more commonly encountered corresponding diagnosis. This type of introduction may not be necessary for residents but can be valuable for medical students.

The inherent limitation in all coat-pocket books is that their small size limits their depth. Only the most stalwart can carry around *Harrison's Principles of Internal Medicine*. Obviously this is not the goal of **The Oxford Handbook of Acute Medicine**; it can never meet everyone's demands all the time. For those interested in anything but cursory detail about pathophysiology, **The Oxford Handbook of Acute Medicine** is lacking. Handbooks cannot be the vanguard of evidence-based medicine, and instead have to rely on the authors' take on the available data. Because of this, it is often difficult for these books to be timely, because it often takes a while before new information is incorporated into clinical practice and accepted by most authors.

Despite that limitation, the content of this book is quite accurate. By necessity, it is a synthesis of guidelines and well-recognized diagnostic and treatment regimens. Some of its empirical antibiotic regimens will not be familiar to American audiences (eg, "chloramphenicol" as treatment for meningitis for patients allergic to penicillin). Otherwise, the content is very applicable and relevant to an American reader.

Handbooks are brief by definition. No matter how applicable the content is, it will not be able to address every possible aspect of a case. One of the most helpful aspects of **The Oxford Handbook of Acute Medicine** is its admonition to call for help when necessary. Though this highlights the inherent limitation of the book, it can prove very useful to the busy intern or medical student. It serves as a useful reminder that the intern should not tackle every problem on his own.

This tradeoff between size/portability and depth of content determines at which level of medical training this book begins to lose its usefulness. The content is designed for medical students and interns to refine their thinking and enable them to pigeonhole pa-

tients into diagnostic and therapeutic categories. The most important patient-management skill that that audience needs to learn is how to classify a patient by the patient's individual problems. That is not to say that they should limit their desire to learn or to think broadly about a patient, but if they cannot focus their thinking, they will have a difficult time doing the actual business of caring for patients. Students and interns need to be able to separate the noise from the signal, and **The Oxford Handbook of Acute Medicine** does a great job at assisting in that task.

Senior residents, for the most part, have mastered the skill of focus, however, and they already know most of the information in this book. They might not have the information available for immediate recall or in as much detail as the book presents it, but they do possess it well enough to take excellent care of patients. Their job is, instead, to reinterpret and question the data in front of them. They need to learn how to examine the facts to make sure that everything makes sense and fits together. For instance, it is usually acceptable to initially treat a patient with a cough, fever, and infiltrate on chest radiograph as if the patient has pneumonia, but the senior resident needs to evaluate the patient for other possibilities and potential complications. **The Oxford Handbook of Acute Medicine** is an excellent book for focusing on individual patient problems and putting a patient into a "box." However, it is not designed for helping senior residents think "outside the box"—the skill they most need to learn.

Another very important skill for senior residents is to learn how to critically appraise the primary literature and begin to use it as the backbone for diagnosis and management. Guidelines are invaluable, but the task of the senior resident and practicing internist is to understand the scientific background of the guidelines and to know when the guidelines are not applicable. Guidelines are helpful but not sufficient for the complete practice of medicine.

Good handbooks, and **The Oxford Handbook of Acute Medicine** is one, follow recommended guidelines, and in the absence of guidelines they take a rational and evidence-based approach when making recommendations. They point out the limitations of their counsel while staying clear of controversy. For example, the section on acute respiratory distress syndrome and management of sepsis mentions the recent

activated protein C trial¹ and the more controversial trial of corticosteroids in sepsis by Annane et al.² Unfortunately, the authors do not provide the citations for those landmark articles, for readers who want to delve deeper. In general, this is a theme in **The Oxford Handbook of Acute Medicine**: it is timely and follows many widely accepted guidelines for problems, such as acute coronary syndrome, advanced cardiac life support, and empirical antibiotic therapy, and it even refers to seminal trials, but it does not provide the citations. This deficiency decreases its usefulness to a wider audience of senior residents and attendings. Also, and more relevant to the book's goal, providing those citations would not substantially increase the book's size. However, minimizing a handbook's size is imperative—probably one of the first questions to ask when preparing to write a handbook. After several months on the wards as an intern, I began to wonder why my back hurt so badly after a day in the hospital. I came to realize that the 15 pounds of detritus, some useful, most not, that I carried around in my white coat was the leading culprit. Since then, I have intimately understood the necessity of a lightweight approach to handbooks, and herein lies my chief complaint about **The Oxford Handbook of Acute Medicine**. Though in general it meets the requirements of low heft, the book contains too many blank pages. Almost every section leaves at least some—and often all—of a page blank. In a 990-page book, that wasted space adds up.

My second biggest complaint is the relatively small number of tables and figures. Most of the information is in easy-to-read, bulleted points. This format works well in general but may not be the most efficient method of communication. Figures and tables should not, in general, replace text, but can supplement it. For example, the workup of hyponatremia is well standardized and formulaic. It is helpful to have text that describes the appropriate tests, but the busy intern wants a super-quick guide and checklist for the studies she or he needs to order. Adding more such figures and tables would improve the book's efficiency and readability.

Beyond these deficiencies, I have few criticisms of the book. The antibiotics it mentions are occasionally different from those typically used in the United States. The book would benefit from section tabs for quick access. It has 2 built-in bookmarks that,

though cute, are not very useful in a book that will not be read in chapter-order. Finally (and this is not a criticism), the book uses some words that are not frequently used in the United States. For instance, when reminding the reader to discuss the case with a consultant, the authors use the word "liase." After growing accustomed to this style of writing, I appreciated it more and regretted its lack in the American style of writing less delicately.

The Oxford Handbook of Acute Medicine is a well-organized and very readable book that is full of useful and accurate information. Its recommendations follow well-accepted guidelines and it makes evidence-based suggestions about diagnosis and management. It does an excellent job of enabling the reader to focus his or her thinking about a patient. It will be a very useful tool for busy students and interns faced with the day-to-day realities of taking care of patients in the hospital. The book's lack of depth limits its audience, however, and makes it much less useful to physicians who have advanced beyond internship, but, again, this is not a criticism, since a book cannot be all things to all people. Breadth and size would have to be sacrificed if the book were to be more useful for senior residents.

Students and interns, however, need a guide that can get them through the day on the wards without suffering back pain from the weight in their white coats. For students and interns I recommend this book and commend its authors for adroitly synthesizing such a large body of information. The book has a useful place in the armamentarium of many junior physicians.

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Clinical Intensive Care and Acute Medicine, 2nd edition. Ken Hillman and Gillian Bishop. Oxford, United Kingdom: Cambridge University Press. 2004. Soft cover, illustrated, 685 pages, \$95.

Clinical Intensive Care and Acute Medicine provides a practical and useful review of essential information for intensive care unit (ICU) clinicians. This book is particularly well-suited for trainees in intensive care, because the descriptions and explanations are fundamental and based on sound pathophysiology principles. The book is organized in a descriptive outline format that facilitates rapid review across the entire scope of critical care medicine. The didactic style, as well as the clear and concise explanations in every chapter, makes this book an ideal introduction for critical care nurses, medical students, therapists, and in-training physicians who are called on to recognize and care for critically ill patients.

The authors emphasize important and evolving concepts, such as the need for a hospital-wide approach to critical care, the early recognition of seriously ill patients, ICU quality assurance, and the systematic assessment of the ICU patient. The first 3 chapters, "A Systematic Approach to Caring for the Seriously Ill," "Organization of an ICU," and "Routine Care of the Seriously Ill," underscore these themes. These chapters are highly clinically relevant and are the portions of the book that are of greatest value to experienced ICU physicians and fellows training in critical care. As explained by the authors in the preface, the title of the 2nd edition of the book was changed to **Clinical Intensive Care and Acute Medicine** because "... the walls of the intensive care units are becoming more virtual as their staff are being asked to consult on seriously ill patients both before and after ICU admission," and "Increasingly the principals of acute medicine are part of the knowledge base of intensive care medicine."

The text is well written, its contents are easy to read, and desired information can be easily located. Key principles of pathophysiology and management (eg, respiratory failure and principles of oxygenation, in Chapter 16) are accurate and logically sound. The book was written by 2 authors and is organized into 31 chapters. The chapters are divided into sections that deal with either basic pathophysiology principles (eg, fluid therapy and electrolytes, nutrition and metabolism, cardiovascular and respiratory fail-

ure) or specific problems, such as diseases and syndromes commonly encountered in the ICU. The latter generally contain brief topic definitions, diagnostic and management strategies, and relevant information on clinical features and specific disease outcomes. Many chapters also have a problem-oriented approach, such as "Interpretation of the Portable Chest Film" (Chapter 17).

The book contains more than 30 well-structured, informative figures and 100 similarly useful tables. There are 8 appendixes, which contain normal laboratory values, cardiorespiratory abbreviations and formulas, as well as a table of therapeutic and toxic drug levels. The index is useful, thorough, and well organized.

Twenty-five of the 31 chapters begin with a summary box that is structured as an objective outline that emphasizes key concepts for that chapter. Nine chapters conclude with a "troubleshooting tips" box that contains a short problem-oriented outline for a particular clinical condition. These are first-rate teaching aids. Instead of a complete bibliography, each chapter ends with a selected reference list that includes Web sites for additional reading. The pros and cons of this approach are well known, but the suggested readings included with each chapter are relevant.

The text is written in straightforward language, and we found no typographical, spelling, or grammatical errors. We do have a few criticisms of the book, such as the omission of ventilator-associated pneumonia as a free-standing topic, and the need for a more thorough discussion of specific treatment strategies related to some topics. Example topics would include disease-specific diagnosis and management "bundles" (such as the "surviving sepsis campaign guidelines for the management of severe sepsis and septic shock"), "tight" glucose control, prophylaxis for deep venous thrombosis, and stress ulcer prophylaxis. However, this is not a major shortcoming, because the content is "unbundled" and embedded within other chapters throughout the book.

In summary, **Clinical Intensive Care and Acute Medicine** is a comprehensive, well-organized, critical care companion book and a useful practical guide that concentrates on the relevant areas common to all critically ill patients. We especially recommend this book for ICU trainees, at all levels, as well as those who work elsewhere

in the hospital but are called on to provide quality critical care to their patients.

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Q&A Color Review of General Critical Care. H Mathilda Horst MD and Riyad C Karmy-Jones MD. (Q&A Color Review Series) New York: Thieme. 2003. Soft cover, illustrated, 192 pages, \$39.95.

Q&A Color Review of General Critical Care is a 192-page handbook that provides a collection of 272 questions and answers covering a broad range of topics related to the breadth of illness seen in both medical and surgical intensive care units. The authors' surgical and critical care expertise is complemented by 49 contributors, who supplied their own questions and expertise to this book.

As the title conveys, the questions and answers are illustrated with color images, including detailed images of endoscopy, angiography, radiographs, ultrasounds, and physical findings, to name a few. The images are of high quality and provide useful illustration of the medical and surgical problems.

The book's layout is such that each question is on the front of the page, and the corresponding answer is on the back of the page. I found this format an easy read, as one has quick access to the answers. Both the questions and answers are succinct, making it a fast read of the most relevant facts. There are several question styles, which probably reflects the diversity of the authorship. Some questions are open-ended, such as, "Describe the appropriate workup and differential diagnosis of effusions," and "Discuss thrombolytic therapy in the management of acute myocardial ischemia." Other questions are more directed, with matching or multiple-choice answers, such as, "Match the drug with its side effect," or "Match the photograph to the clinical condition." The most common format is a brief clinical vignette with corresponding images or data that require interpretation to determine diagnosis and management.

In general, I found the answers practical and informative. The types of information

provided in the answers vary; there are discussions of drug mechanism, disease management, diagnostic testing, data interpretation, and use of formulas, such as calculation of oxygen delivery, creatine clearance, and fluid replacement in a burn patient. Some answers are also punctuated by helpful graphs, charts, or other images. Overall, this book does an excellent job of addressing numerous critical care issues; however, there are occasional omissions, such as the lack of detailed information regarding low-tidal-volume ventilation for acute respiratory distress syndrome (question 140) or identification and treatment of intrinsic positive end-expiratory pressure as part of the discussion on management of bronchospasm in a ventilated patient (question 26). In addition, the authors did not provide citations, which would have been a useful addition.

The authors state in their preface that this book is designed as both a review book and reference manual. I found it a good review of a broad range of critical care potpourri, especially for students and house staff. It will also provide a good review for critical care nurses and respiratory therapists. Its format and color images make for a quick and enjoyable read. As a reference manual it is more difficult to navigate, although there is a detailed index in the back for those interested in a specific diagnosis or disease topic.

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Surviving Intensive Care. Derek C Angus MD MPH and Jean Carlet MD, editors (*Update in Intensive Care Medicine* series, Jean-Louis Vincent MD PhD, series editor). Heidelberg, Germany: Springer-Verlag. 2004. Soft cover, illustrated, 344 pages, \$49.95.

This sleek and modern-appearing paperback is a recent publication by Springer-Verlag, in the series *Update in Intensive Care Medicine*. As a clinical researcher interested in the long-term outcomes of survivors of critical illness, **Surviving Intensive Care** caught my attention. I eagerly scanned the cover and thumbed through the pages, curious about the goals of the text and its intended readership. The only insight was offered in a few sentences on the book's back cover, which concluded, "**Sur-**

iving Intensive Care, written by the world's experts in this area, is dedicated to better understanding the consequences of surviving intensive care and is intended to provide a synopsis of the current knowledge and a stimulus for future research and improved care of the critically ill."

The content of **Surviving Intensive Care** is evenly divided between 4 sections in a total of 25 chapters. The first section, "Natural History of Critical Illness," reviews the results of studies of long-term outcomes of ICU survivors. There are chapters on survival, morbidity, health-related quality of life, and neuropsychological consequences after intensive care. The effects of caregiving on families of survivors, and the economic consequences of intensive care unit (ICU) survivors are described. This section concludes with discussion of the unique issues of geriatric and pediatric survivors of critical illness. The first section is clearly written, comprehensive, and easy to read.

The next section is entitled "Predictors and Modifiers of Long-term Outcomes." The chapters include reviews of pre-ICU factors, patient-specific factors, ICU environmental factors, and of the impact of routine ICU supportive care on long-term outcomes. While the first 2 sections are brief and provide little insight, the chapters on sleep and supportive care are both fascinating and relevant.

The third section, "Improving Methods to Capture Long-term Outcomes in Clinical Studies," turns from a focus on the results to the methodology of outcome studies. There are chapters on the use of various outcome measures as end points in clinical trials, including disease-free survival, physiologic surrogate end points, neuropsychological tests, and other measures of health status. The last chapter in this section addresses the methodology used to study the quality of communication with families by ICU providers as a primary outcome. Many of these methodology chapters are very detailed and probably of interest only to a subset of those who perform critical care research.

The final section, "Approaches to Improve Long-term Outcomes," is divided between recommendations of specific clinical practices to improve long-term outcomes, recommendations of specific methodologies to study patient-centered and economic outcomes, and philosophy of system-based ap-

proaches to changing the current paradigm of ICU care delivery. Often more opinion and philosophy than science, this section is interesting but uneven.

The list of authors, including the special editors Derek Angus and Jean Carlet, reads like a list of who's who in critical care outcomes research. From the first chapter on long-term survival after ICU discharge by Keenan and Dodek (from Vancouver, British Columbia) to the last chapter on defining success in the ICU by Pronovost (of Johns Hopkins University), the editors did a superb job of collecting authors who are thought-leaders, who have demonstrated expertise in their subjects, and whose research has substantially contributed to the current understanding of the long-term consequences of ICU survival.

The idea of dedicating a book to the subject of surviving critical illness is novel and reflects a new movement in critical care research. Historically, research in the ICU has focused on much shorter-term outcomes, such as physiological improvement, liberation from mechanical ventilation, ICU discharge, and 28-day survival. The chapters reviewing previous and ongoing outcomes studies of ICU survivors are truly cutting-edge. In her chapter on functional outcomes after surviving acute respiratory distress syndrome.

Herridge provides insight from her own ongoing large follow-up study of acute respiratory distress syndrome survivors, and proposes "a new construct for considering the complexity of morbidity in patients who survive an episode of critical illness." Rubenfeld provides a thought-provoking, articulate, and well-referenced chapter on surrogate measures of patient-centered outcomes, in which he challenges clinicians to think twice (or more) before "adopting a therapy based on improvements in surrogate outcomes," stating that "studies of surrogate outcomes have repeatedly provided misleading information about patient-centered treatment effects in many areas of clinical investigation." In McMullin and Cook's chapter, "Changing ICU Behavior to Focus on Long-term Outcomes," the authors suggest that "to change ICU behavior to focus on long-term outcomes, we need to increase global awareness of disability after ICU discharge, and expand the involvement of the ICU team in key management decisions outside the ICU." These and other authors use their comprehensive understanding of the

literature and their own research contributions as a springboard to the future.

While much of the content is first-class, **Surviving Intensive Care** is not a cohesive work. There is no introduction to provide an overview to the text, no cross-referencing between chapters, and no obvious attempt to minimize repetition of information presented in different chapters. Most chapters do not read as if they were written for a textbook; rather, the text reads as a compilation of pieces that were incompletely modified to incorporate into a book. A low point of the text is the chapter entitled "Disease-free Survival and Quality of Life as End-points in Clinical Trials," which was written by an oncologist who made no effort to connect the experience of follow-up studies of cancer patients with that of ICU survivors. Critical illness and critical care are never mentioned in this chapter. In fact, the author makes statements that show a lack of insight into critical care research, such as, "An initial (pre-study) evaluation is always needed: follow-up evaluations would be useless without any baseline assessment for comparison." Since researchers generally cannot know which patients will be struck by critical illness, we do not have the luxury of performing baseline assessments.

In Chapter 22 the authors write, "These meetings shape opinion and future research, culminating in academic milestones such as this Roundtable Meeting on Surviving Critical Illness." In March 2002 an expert panel convened in Brussels to summarize current knowledge of the epidemiology and plans for future research of survivors of critical illness. That roundtable meeting was concisely reviewed by Angus and Carlet in 2003.¹ The participants in that roundtable included the authors of every chapter of the book **Surviving Intensive Care**. Clearly, these chapters are modified versions of their reports to the Roundtable. Had that information been presented up front in an introduction, the variability of scope and writing styles would have been better understood and more easily overlooked by the reader.

There are many examples of this text's poor attention to detail. There are abundant typographical errors, including incorrectly spelled words, extraneous punctuation, superimposed numbers and letters, and misplaced decimal points. There are also mistakes in the reference lists. For example, in the chapter on health-related quality of life, the text and table describe the results of McHugh's important follow-up study of

acute respiratory distress syndrome patients in Seattle, Washington, published in 1994.² Mistakenly, the authors instead cite "McHugh GJ et al. Follow-up of elderly patients after cardiac surgery and intensive care unit admission, 1991–1995. *New Zealand Journal of Medicine*."

Surviving Intensive Care has clear typography, high-quality paper, and a strong binding that withstands considerable abuse. The type doesn't easily smear. The illustrations and tables, although simple and not abundant, are clear and generally informative. The chartreuse spine is easy to find in an overstuffed bookcase. Unfortunately, the book's indexing is confusing and incomplete. For example, despite the multiple mentions of long-term dysfunction of muscle, nerve, and physical function, none of these terms is in the index. Myopathy, neuropathy, and polyneuropathy are also not indexed. Instead, the reader needs to find "neuromuscular dysfunction," which appears as a subcategory of "neuromuscular blocking agents," or "functional limitation," which appears as a subcategory of "functional capacity."

While individual chapters and sections of **Surviving Intensive Care** may have broader appeal, I think the book's heavy emphasis on methodology and systems theory is beyond the scope of most critical care practitioners. As a whole, **Surviving Intensive Care** is probably most of interest to clinical researchers interested in considering long-term outcomes as primary or secondary end points of observational or interventional research in the ICU. Nonetheless, there are diamonds in the rough in **Surviving Intensive Care**, which has already become a valuable reference for me. Hopefully, the majority of the authors will reconvene to create an updated and more polished version of this text in the future.

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Sepsis. Guillermo Ortiz-Ruiz MD, Marco A Perafán MD, and Eugen Faist MD, editors. New York: Springer-Verlag. Soft cover, 174 pages, \$49.95

No other condition that afflicts critically ill individuals has captured the interest of clinical researchers as much as sepsis and its dreaded complication, septic shock. There is a bewildering profusion of books, review papers, and monographs that purport to describe the causes of and therapies for sepsis. This book, edited by Ortiz-Ruiz, Perafán, and Faist, adds to the discourse. However, in my opinion, what probably began as a well-meaning attempt to collate our current knowledge on sepsis into a concise volume ended up as an easy-to-read, relatively succinct review of the pathophysiology and treatment of acute pulmonary conditions in critically ill individuals.

The book is the collaborative effort of widely recognized clinical researchers and clinicians from Argentina, China, Colombia, Germany, Mexico, and the United States. As such, the book has an interesting international flavor that may appeal to health-care practitioners worldwide. It is obvious that English is not the first language of many of the authors, but the editors did a credible job in proofreading and preserving a harmonious similitude of style throughout the text.

The book begins by a discussion of the pathophysiology of sepsis. The quantity and complexity of the information contained in this chapter requires careful attention by the reader. It can be overwhelming, in particular the discussion on the immunologic responses associated with sepsis. Much of the chapter suggests a fairly high degree of certainty about the causes of sepsis, but I think the reader should maintain a healthy skepticism. Moreover, given the complex nature of the biological mechanisms imputed in the genesis and perpetuation of sepsis, this chapter, as well as the rest of the book, could have greatly benefited by the liberal use of figures and diagrams.

Chapters on pneumonia, one of the most common causes of sepsis, follow. I particularly enjoyed reading the erudite discussions on community-acquired pneumonia. It was interesting to learn about the preva-

lence of certain causative organisms in different countries. For example, *Legionella* pneumonia is rarely found in South America. These chapters, along with the chapter on ventilator-associated pneumonia, will be of particular interest to most respiratory therapists. They are well written, abundantly referenced, and clinically relevant.

The chapters on diagnostic procedures focus mainly on diagnosing pneumonia via fiberoptic bronchoscopy and open-lung biopsy. These chapters may be useful to readers not familiar with these procedures, although I found them to be too succinct, and the references cited are a bit dated. These chapters also would have benefited from figures and flow diagrams to help clinicians diagnose severe pneumonia.

Other chapters include discussions on pulmonary conditions commonly associated with sepsis. The chapter on acquired immune deficiency syndrome is very well written and comprehensive, but, again, it is a bit dated. For example, references to studies published in 1998 and 1999 are referred to as "recent."

The chapter on sepsis and exacerbation of chronic obstructive pulmonary disease (COPD), with 250 references, stands out as an excellent review of the topic. Comprehensive and easy to read, this chapter covers the pathophysiology, clinical manifestations, and available therapies for COPD exacerbation. Among the pharmacologic interventions discussed are bronchodilators, corticosteroids, and antibiotics. There are sections on hemodynamic support, physiotherapy, and nutrition, and the detailed discussion on mechanical ventilatory support incorporates the most recent advances. I strongly recommend this chapter to anyone who wishes to learn more about the subject or as a solid springboard for further study on the causes and treatment of COPD exacerbation.

Similarly, the chapter on acute respiratory distress syndrome provides an excellent review of current thinking regarding its pathophysiology and treatment. Of particular interest is the discussion on mechanical ventilation in acute respiratory distress syndrome, protective lung strategies, and positive end-expiratory pressure.

The chapter on management of pleural effusions and sepsis appears to be an afterthought, but it may appeal to those not familiar with the subject. I found the sections on video-assisted thoracoscopic surgery and decortication interesting and informative.

In summary, this book is more than a treatise on sepsis and septic shock; it is a digestible compendium on the causes and treatment of respiratory conditions in critically ill individuals. Perhaps the title was chosen to attract a wider audience. In my opinion, however, that was not necessary, as the book holds its own as a reader-friendly review of the causes and treatment of acute respiratory failure.

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Percutaneous Tracheostomy: A Practical Handbook. Henry GW Paw BPharm MR-PharmS MBBS and Andrew R Bodenham MBBS. Cambridge, United Kingdom: Cambridge University Press. 2004. Hard cover, illustrated, 158 pages, \$80.

Since the advent of modern critical care, critically ill patients have experienced better outcomes. Without a doubt, more patients have survived despite suffering from multiple comorbidities. Airway management in particular is a critical issue when caring for such patients. Whether for long-term assisted ventilation or out of concern for incompetent-airway protection, tracheostomy is the unavoidable procedure. In critical care medicine we occasionally confront the consequences of complications in open surgical tracheostomy. With percutaneous dilational tracheostomy (PDT), we now have a viable alternative. Much has been written on the advantages and disadvantages of surgical tracheostomy and PDT, but little information about the practice of PDT has been available in reference books. This changes with the publication of **Percutaneous Tracheostomy: A Practical Handbook**.

This hard-cover textbook is the first to "provide the newcomer and the experienced practitioner alike with a perfect introduction to this increasingly widely used technique." Do not be confused by the name "percutaneous tracheostomy"; the book primarily describes PDT in contrast with surgical tracheostomy, and the authors use "percutaneous tracheostomy" interchangeably with "PDT."

The authors strictly follow their aim in providing a balanced overview of PDT. No matter what level of experience you have with the procedure and management of tracheostomy, this is a book deserving of your time. To see is to believe. It is amazing to see the 95 figures and/or pictures in this 143-page text. The easy-to-use format is feasible because the book's design uses different colors for each chapter on the upper margins for easy look-up from the table of contents. The flow of the text is fluent and well-organized, although there is some redundancy of contents in some chapters. Being a practical handbook, you can sense that the authors explicitly share their experience heartily.

Chapter 1 chronicles the history of tracheostomy. There is a concise overview, beginning with the first recorded case, in ancient Egypt around 3,000 BC, up to the development of modern PDT. Only after Toys and Weinstein used a Seldinger guidewire for the procedure did percutaneous tracheostomy take a vital step forward. The first percutaneous progressive dilational technique was developed by Pasquale Ciaglia and reported in June 1985. It is now performed in 75% of intensive care units in England and Wales.

Chapter 2 briefly summarizes the neck anatomy related to tracheostomy. Sometimes it is avascular in the midline of the neck, but remember that it is not always the case. In patients with tracheal intubation, the position of the endotracheal tube tip usually changes with extension of the neck. The authors mention the same phenomenon with the trachea position differing among youth and the elderly, based on cervical extensions and flexions, so one must be cautious when determining the tracheostomy incision site.

Chapter 3 focuses on the complications of translaryngeal intubation and indications for tracheostomy. No randomized controlled trial has specified the optimal timing for tracheostomy in critically ill patients. As the authors describe, tracheostomy timing should be made on a case-by-case basis. Interestingly, they point out the trend of earlier tracheostomy after the advent of PDT. Whether there is an increasing number of avoidable, unnecessary procedures needs to be closely monitored.

Chapter 4 briefly summarizes contraindications to tracheostomy. The authors' mention of the emergency use of percutaneous tracheostomy is particularly notable.

Sometimes surgical tracheostomy is needed as a rescue procedure. The safety and availability of PDT in that situation are not so convincing in current practice.

Chapters 5 and 6 compare the differences among translaryngeal intubation, PDT, and open surgical tracheostomy. It is not uncommon for a patient to have terrible complications with long-term translaryngeal intubation, such as periodontitis, mucus plugging in the endotracheal tube, and vocal-cord granuloma. Tracheostomy can reduce dead space and airway resistance and ease ventilator weaning. The authors provide a balanced view of the benefits and detriments of these airway-management techniques. Chapter 6 includes tables that summarize the complications of PDT versus surgical tracheostomy.

Chapter 7 concisely but comprehensively covers current PDT techniques. The colorful pictures illustrate the various commercial kits available in the marketplace, including the Ciaglia sequential dilator kit, the PercuQuick sequential dilator kit, and the Blue Rhino kit. An in-depth reading is recommended to fully appreciate the various approaches to PDT.

Chapter 8 focuses on the tracheostomy tube. The information on design features and choices is the same as those in widely available tracheostomy textbooks.

If you are a newcomer to the practice of PDT, you must not miss Chapter 9's discussion of practical considerations of anesthesia and surgical techniques. The authors describe step-by-step surgical techniques. One of my favorite figures is Figure 9.5, which details the steps in the dilation sequence and includes bronchoscopic views. There are potential risks in the misplacement of the needle and guidewire during PDT.

Chapter 10 discusses equipment used to avoid and solve certain problems and ensure safety and accuracy in PDT. Equipment choices include bronchoscopy, ultrasound, and capnography. Bronchoscopy in particular is invaluable, because it can transilluminate the trachea, verify accurate placement of the needle and guidewire, and is a very good teaching aid. Bronchoscopy during PDT is now common practice, with its use increasing from 30% in 1998 to 81% in 2002.

Chapter 11 addresses complications specific to PDT, including needle damage to the bronchoscope, hypoxia, and hypercapnia. The authors state that there is a misconception about the bleeding complication. They point out that "it is wrong to always consider an open procedure to be the safest option. . . It may be better to perform an ultrasound-guided percutaneous procedure with minimal dissection in a controlled en-

vironment." Experienced operators can achieve a lower incidence of bleeding complications with PDT than with surgical tracheostomy.

Chapter 12 covers the complete care of tracheostomized patients, including aftercare, decannulation, and follow-up after discharge from the intensive care unit. Be especially cautious if the patients might be going to a unit where the staff are not familiar with tracheostomy care, which can lead to life-threatening events.

Chapter 13 offers PDT tips and tricks. I found this the most precious information the authors shared, reflecting their decades of experience in this field.

With PDT well beyond its infancy and, indeed, gaining popularity in contemporary critical care, I am delighted to see a book regarding its evolution, techniques, and management. In an easy-to-follow, general outline format, this book uses well-illustrated figures and pictures to introduce PDT. The authors have achieved their main goal, by providing "a balanced overview of techniques without getting overwhelmed with detail."

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