

Respiratory Critical Care. Craig Davidson and David Treacher, editors. London: Arnold. 2002. Hard cover, illustrated, 307 pages, £65, \$98.50.

This book has 22 chapters and 39 contributors. The 2 editors, Davidson and Treacher, are British respiratory intensivists. The contributors represent Great Britain, Germany, Australia, Belgium, France, Italy, Australia, Canada, and Spain. There is only 1 American contributor, who is the last author of 1 chapter. Accordingly, the book has a markedly British and European flavor. Although this is not meant to be a value judgment, it appears unusual that such a book would be written without a greater American contribution given the worldwide impact of respiratory and critical care practice in the United States.

When I first received the book, I noted the picture of the mechanical in-exsufflator on the cover. Having some interest in the use of this device to facilitate airway clearance in patients with neuromuscular disease, I quickly tried to find the portion of the book that addressed the use of the device. Interestingly, I could find only one paragraph in the book on this topic, and no illustration. In fact, I searched through the book and could not locate any of the 3 illustrations on the cover. I guess there is no rule that says the illustrations on the cover must be included in the text of the book, but it is a little unsatisfying as a reader to expect that the topics suggested by the illustrations on the cover will be developed in the book and then to find that they are not.

Each chapter begins with a list of topics covered in that chapter. Overall, the chapters cover topics that one might expect in a textbook of respiratory critical care. However, there is one glaring omission: that is, there is no chapter devoted to management of asthma and chronic obstructive pulmonary disease exacerbation. Thus, important topics such as bronchodilators and their administration are omitted.

Chapter 1 covers the topics of respiratory muscles, pulmonary mechanics, and ventilatory control. Figure 2 illustrates the effect of the load-capacity relationship on the respiratory muscles. The listed causes of increased load in the illustration are in-

creased airways resistance and decreased chest wall compliance. However, other important causes of increased load, such as decreased lung compliance, are not included. The chapter includes a box that nicely describes techniques to measure the pressure-volume curve of the respiratory system. The section on electrophysiologic measurements is interesting but of limited clinical usefulness. There is an illustration intended to describe the measurement of dynamic intrinsic positive end-expiratory pressure (auto-PEEP). This illustration is confusing at the least, and I believe it is wrong. From what I can make of the illustration, it indicates that inspiratory flow precedes a decrease in esophageal pressure in a spontaneously breathing patient. In fact, in the presence of auto-PEEP the esophageal pressure decreases *before* the initiation of flow; the amount of esophageal pressure required to generate flow at the airway is an indication of the amount of auto-PEEP present.

Chapters 2–5 cover mechanical ventilation. Chapter 2, “Mechanical Ventilation: The Basics,” is not bad, albeit somewhat superficial. Chapter 3, “Mechanical Ventilation: Ventilatory Strategies,” leaves much to be desired. Much of the chapter is based on the bias of the author rather than the body of evidence that has evolved over the past 10 years. For example, after briefly mentioning the Acute Respiratory Distress Syndrome (ARDS) Network trial, the author provides a case study in which the reader is encouraged to use airway pressure-release ventilation in the care of patients with ARDS. This clearly conflicts with the recommendations of the ARDS Network’s report, in which volume-controlled ventilation was used.

Chapter 4 is entitled, “Ventilator-Patient Interaction.” Like many of the chapters in the book the material covered is reasonable but superficial. Again in this chapter there is a figure that is confusing or incorrect. The figure in question is intended to show how triggering can be improved if PEEP is used to counterbalance auto-PEEP. However, close examination of the figure shows that the PEEP is *lower* when triggering is best! I wonder whether the 2 panels in the figure actually came from the same patient.

Chapter 5, “Noninvasive Mechanical Ventilation in Acute Respiratory Failure,” provides much practical information, although there is little coverage of the evidence base for use of noninvasive ventilation.

Chapter 6, “Contemporary Issues in Critical Care Physiotherapy,” covers lots of topics, but none in much detail. Again there seems to be an aversion to reviewing the evidence. For example, there is a good discussion (with an excellent illustration) of the technical aspects of prone positioning, but there is no mention of the study by Gattinoni et al,¹ which reported no survival benefit from the use of prone positioning with ARDS patients.

Chapter 7 is entitled, “Diagnostic Methods in Respiratory Intensive Care Medicine.” The chapter primarily covers bronchoscopy, with very little coverage of chest radiography. I found it curious that there is not a single illustration in this chapter.

Chapter 8, “Monitoring,” covers both respiratory and hemodynamic monitoring. There is a discussion of indwelling arterial blood gas monitoring but no mention of point-of-care testing. It is curious that the Bohr equation for alveolar dead space is provided, but not the equation for the more commonly calculated physiologic dead space. There is an illustration of a normal capnogram but no illustration of an abnormal capnogram. As is often the case in textbooks, the ventilator waveforms are highly stylized rather than real waveforms from a ventilator. The section on hemodynamic monitoring is very superficial.

Chapter 9, “Respiratory Emergencies I: Medical,” includes a nice discussion of the management of hemoptysis. There are also some excellent color plates, although it is not clear why there are the redundancies of showing these as both color plates and black-and-white figures.

Chapter 10, “Respiratory Emergencies II: Chest Trauma, Air Leaks, and Tracheostomy,” includes a very good discussion of the management of traumatic pneumothorax.

Chapters 11 and 12 cover issues related to acute lung injury. Chapter 11, “Pathophysiology of Acute Lung Injury,” is a very good chapter with a nice discussion of pul-

monary and systemic markers of lung injury. Chapter 12, "Management of Acute Lung Injury," includes shaded boxes that emphasize certain information, which is a nice feature that I would have liked to see used throughout the book. It is stated that there are no phase II or phase III studies of the prone position, which clearly fails to acknowledge the work of Gattinoni et al.¹ It also seems that the authors' bias enters into the chapter. For example, there is a detailed description of setting PEEP by using a decelerational PEEP approach; to my knowledge there is no evidence to support this, beyond the mathematical analysis previously published by the principal author of the chapter.

Chapter 19 is entitled, "Weaning From Mechanical Ventilation." More emphasis could have been placed on the role of spontaneous breathing trials. It also could have been pointed out that the poorest weaning outcomes have been associated with the use of synchronized intermittent mandatory ventilation. The discussion of extubation criteria does not mention the issues of airway protection and the ability to clear secretions. There could be more discussion of reasons for weaning failure. There is no mention of the weaning guidelines from the collective task force facilitated by the American College of Chest Physicians, the American Association for Respiratory Care, and the American College of Critical Care Medicine.² At the end of this chapter there is a section called "Volume-Reduction Surgery and Transplantation," which seems strangely placed in a chapter on weaning from mechanical ventilation.

Chapters 14–16 relate to respiratory infections. Chapter 14, "Community-Acquired Pneumonia," provides a reasonable overview of the topic. Chapter 15 is entitled, "Nosocomial Pneumonia," but is largely a discussion of ventilator-associated pneumonia. This chapter touches on most of the issues related to ventilator-associated pneumonia but does not discuss the role of in-line suction catheters. Chapter 16, "Infection in the Immunocompromised Patient," provides comprehensive coverage of this increasingly important topic.

Chapter 17, "Pleural Disease," provides a nice discussion of pleural effusions, emphysema, pneumothorax, and bronchopleural fistula. The tables and figures in this chapter are particularly well done and informative. Chapter 18, "Acute Interstitial Lung Disease," is a nice overview of this topic. Chapter 19, "Pulmonary Embolism

and Hypertension," deals almost exclusively with the topic of pulmonary embolism, with virtually no coverage of other causes of pulmonary hypertension.

Chapters 20–22 relate to management and operational topics in respiratory intensive care. Chapter 20, "Organizational Issues in Respiratory and Critical Care," is an editorial making the case for the role of respiratory physicians in the intensive care unit. This discussion is distinctly British, given the common role of pulmonary physicians in critical care units in the United States. Chapter 21, "Ethical Issues in the Intensive Care Unit," provides nice coverage of issues such as withdrawal of care, advance directives, and consent. The final chapter, Chapter 22, is entitled, "Respiratory Failure: New Horizons, New Challenges." In this chapter the book's editors editorialize on a variety of topics, including a lengthy discussion of issues related to management of refractory hypoxemia.

So what is my overall impression of this book? As indicated throughout this review, some parts of the book are good, whereas other parts are lacking. Most topics are not developed in great detail. Moreover, the presentation is often colloquial and anecdotal in nature, as opposed to evidence-based. This certainly cannot be considered a reference text. I suspect that intensivists in the United States will find that the text adds little over available textbooks of respiratory medicine and critical care. Respiratory therapists will find little that is not already found in standard respiratory care textbooks. I think that intensivists and respiratory therapists will be frustrated by the superficial coverage of respiratory-care-related topics in this book.

Dean R Hess PhD RRT FAARC

Department of Respiratory Care
Massachusetts General Hospital
Harvard University
Boston, Massachusetts

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Fast Facts—Respiratory Tract Infection, 2nd edition. Robert C Read MD and Donald E Craven MD. (Fast Facts series.) Oxford, United Kingdom: Health Press. 2003. Soft cover, illustrated, 125 pages. £12. \$18.94.

This is a handy little monograph that provides a lot of information in a concise and easily accessible format, for a modest price. The book is intended for physicians, nurses, and medical students, and is indeed suitable for all of those groups. Respiratory therapists would also find this text informative.

The book is organized into 10 chapters, which cover: community-acquired pneumonia; hospital-acquired pneumonia; infective exacerbations of chronic obstructive pulmonary disease; pulmonary tuberculosis; bronchiectasis and cystic fibrosis; pneumonia in immunocompromised patients; human immunodeficiency virus and pulmonary disease; viral pneumonia; biological weapons that cause pulmonary disease; and future trends. Each chapter includes a list of key points and a short list of references at the end. The book includes a glossary of abbreviations, a list of useful addresses and Web sites, a table of generic and brand names of drugs, and an index.

The topics are well chosen and succinctly reviewed. In general the writing style is clear and concise. The text is liberally sprinkled with tables, bullet lists, illustrations, and photographs that enhance readability and strengthen emphasis. The chest radiographs and computed tomograms are reproduced with adequate quality. Each chapter concludes with a list of key points and a short list of key references. The focus is on practical aspects of clinical features, diagnosis, and management, but relevant aspects of epidemiology, pathogenesis, and prevention also are discussed. For the most part the material is accurate and up-to-date. Each chapter can be read in a few minutes and effectively distills the clinically important information on the topic.

Both the authors are specialists in infectious diseases: Dr Read is a professor of infectious diseases at Royal Hallamshire Hospital in Sheffield, England. Dr Craven is chair of the Department of Infectious Diseases at the Lahey Clinic in Burlington, Mas-