

**Practical Pulmonary and Critical Care Medicine: Respiratory Failure, and Practical Pulmonary and Critical Care Medicine: Disease Management.** Zab Mosenifar and Guy W Soo Hoo, editors. *Lung Biology in Health and Disease* series, volumes 213 and 214, Claude Lenfant, executive editor. Boca Raton: Taylor & Francis. 2006. Hard cover, illustrated, 1,065 pages, \$299.95.

The rapid pace of medical progress and technology has made electronic databases and reference materials the primary resource for many critical care providers in their day-to-day activities. Although most of us still have our classic reference texts impressively arrayed on our office shelves, many argue that the ready availability of updated electronic information is causing it to rapidly replace the role filled by published textbooks.

So why write another pulmonary and critical care medicine textbook? Mosenifar and Soo Hoo argue that the successful application of this readily available information requires a little experience. The stated goal of their 2-volume reference text is to provide a foundation of practical information to bridge a perceived translational gap between currently available electronic knowledge and the effective daily bedside delivery of critical care medicine. This 2-volume set is a well-written resource that largely achieves this goal. If you are a pulmonary/critical care fellow or staff physician looking to brush up on the current evidence behind common intensive care unit (ICU) practices, these books are for you. They would also serve as an excellent quick reference for new ICU directors and nurse managers, or in a medical library as a user-friendly text for a resident preparing a presentation on a critical care topic.

Volumes 213 and 214 of the *Lung Biology in Health and Disease* series, **Practical Pulmonary and Critical Care Medicine: Respiratory Failure**, and **Practical Pulmonary and Critical Care Medicine: Disease Management**, are well-bound and well-edited hardback texts. The contributors include 12 well-known experts from across the United States, along with numer-

ous authors from the editors' local area. The text maintains a very effective, consistent, and informative style throughout both volumes. The chapters are generally organized according to the series' traditional recommended format of sections and subsections, which sometimes can be distracting from the content. Several authors deviate from this format to provide a more step-by-step approach to practical procedure skills such as airway management, and I found these sections more effective than the later paragraph-format descriptions of chest tube and pulmonary artery catheter insertion.

In Volume 213 the first 5 chapters take the reader systematically through the indications for and methods of oxygen therapy; assessment and management of the routine and difficult airway; and the use, monitoring, and discontinuation of noninvasive and invasive mechanical ventilation. The next chapter focuses on the little-discussed issue of prolonged mechanical ventilation, and the remainder of the book is dedicated to a general review of common ICU diagnostic and therapeutic procedures.

The chapter on oxygen therapy and airway management is an excellent, step-by-step review of the physiologic basis for oxygen therapy, and gives a detailed description of current methods of delivery, with numerous accompanying pictures for clarity. It also includes a brief discussion of heliox therapy, along with emerging clinical data regarding its potential use in asthma and exacerbations of chronic obstructive pulmonary disease. This chapter in particular would be an outstanding reference and training tool for respiratory therapists.

Although most of the content is not new, the evidence-based reviews of noninvasive ventilation and liberation from mechanical ventilation are very thorough, and they include practical and specific recommendations for patient selection, equipment setup, and predictors of success and failure. Particularly well done is the analysis that supports continuous positive airway pressure over other forms of noninvasive ventilation in patients with heart failure. The subsequent chapters on the modes and monitoring of mechanical ventilation include a variety of ventilator waveform graphics that are very effective, although the discussion

of patient-ventilator synchrony issues is disappointingly brief.

One of the highlights of this volume is the chapter on prolonged mechanical ventilation, which is a little-discussed topic in most critical care texts. The authors present an interesting and well-researched viewpoint on the shifting environment of care and outcomes in these patients, along with a systematic review of the physiologic derangements associated with chronic ventilator dependence. They also provide an evidence-based, practical approach to ventilator weaning and strategies for improving respiratory muscle strength and endurance in this challenging patient population.

The chapters on critical care procedures are relatively well presented, including the placement and use of arterial and central venous catheters, tube thoracostomy, and bronchoscopy. This section tends to be a little basic for readers who work regularly in the ICU, but it could serve as a good introduction for residents or fellows early in their training. Its strengths include some brief but practical advice on the use of ultrasound, and well-presented details on appropriate venous catheter insertion depths and site selection. The review of indications and step-by-step guide to percutaneous tracheostomy is concise and excellent, with very good illustrations. The chapter on radiology is mainly focused on the portable chest radiograph, with useful detail on appropriate device placement, volume assessment, and manifestations of barotrauma. It is sometimes difficult to identify the relevant features identified in the text on the accompanying radiographs, and the section on common thoracic complications has a somewhat choppy organization that is distracting.

Volume 214 deals with the treatment of common critical care problems, and focuses on recent advances, developments, and clinical controversies. Topics include the management of acute lung injury, exacerbations of asthma and chronic obstructive pulmonary disease, hemoptysis, pneumonia, pulmonary embolism, neuromuscular respiratory failure, acute coronary syndrome, heart failure, sepsis, and acute gastrointestinal hemorrhage. There are also chapters dedicated to common issues in critical care prac-

tice, including neurologic emergencies, acute renal failure, nutritional support, sedation, infection control, and medical ethics. Virtually all the chapters in this second volume are clear, readable, and well researched. Most of the chapters function as well-presented evidence-based reviews and updates of current clinical practice, and they provide effective practical recommendations and tables for rapid reference.

The discussion on acute lung injury concisely summarizes recent findings from the Acute Respiratory Distress Syndrome Network and other authors. It also reviews the current evidence behind commonly attempted rescue maneuvers for patients with refractory hypoxemia, although there is no discussion of airway-pressure-release or high-frequency oscillatory ventilation. The chapters on exacerbations of obstructive lung disease, critical care sedation, and pain management provide excellent and systematic pharmacology reviews. There is a helpful discussion of the risks and benefits of bronchial artery embolization and surgery in patients with hemoptysis, and an outstanding summary of the current evidence and practical management of massive pulmonary embolism and chronic thromboembolic pulmonary hypertension.

Highlights of the section on cardiology include a concise summary of the clinical importance of positive troponins in the ICU, and discussion of the evolving role of antiplatelet therapies other than aspirin in acute coronary syndrome. Although the discussion of  $\beta$  natriuretic peptide in congestive heart failure is good, the subsequent section on nesiritide lacks balance. This section would have been strengthened with an evaluation of the recent meta-analysis that suggested that nesiritide may be associated with an increased risk of death after treatment for acutely decompensated heart failure.<sup>1</sup>

The most original contributions to this volume are the chapters on pneumonia and ethics. Wunderink provides a very clear and interesting analysis of a vast and sometimes confusing body of literature on ventilator-associated pneumonia and severe community-acquired pneumonia, and explains the rationale for current management guidelines. The chapter on practical medical ethics in intensive care traces a simple approach to bioethics problems that would be a useful guide for any hospital ethics committee, and contains some interesting and specific recommendations for the management of pain and other symptoms at the end of life.

Neurologic issues are covered extensively, including a concise approach to stroke, encephalopathy, and brain death in the ICU, with easy-to-reference tables. The chapter on neurologic respiratory failure is one of the most comprehensive and complete reviews I have read on this subject, but the practical management issues are a little lost in the overall scope and detail that it provides.

The reviews of sepsis, acute renal failure, gastrointestinal bleeding, and infection control all continue to provide very clear, practical, and evidence-based guidance toward effective critical care management strategies. The chapter on nutrition provides an excellent discussion of the timing, route, and composition of nutritional support, including a good summary of the current evidence for immunomodulating diets and specific enteral formulations. Although few would argue the benefits of enteral over parenteral nutrition in critically ill patients, this chapter's strongly negative conclusions about parenteral feeding clearly reveal the author's bias and should be tempered by other more balanced reviews.

The volume ends with a chapter on the "electronic ICU," providing an excellent overview of the process-based advantages and challenges of the electronic medical record, and a very complete review of the currently available electronic critical care applications and databases. I was somewhat surprised to see no discussion of the electronic ICU movement, which is a current issue of some interest and controversy in critical care.

I will continue to use electronic databases and reference materials as my primary resource for the day-to-day questions that arise in my ICU practice. However, I will also add Mosenifar and Soo Hoo's textbook to my shelf of reference books, and in an easy-to-reach location, because of its excellent literature summaries and bibliographies, useful graphics, and accessible information that are applicable to the issues our critical care team discusses daily on rounds.

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## REFERENCE

1. Sackner-Bernstein JD, Kowalski M, Fox M, Aaronson K. Short-term risk of death after treatment with nesiritide for decompensated heart failure: a pooled analysis of randomized controlled trials. *JAMA* 2005; 293(15):1900–1905.

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**Disorders of the Respiratory Tract: Common Challenges in Primary Care.** Matthew L Mintz MD. *Current Clinical Practice* series, Neil S Skolnik, series editor. Totowa, New Jersey: Humana Press, 2006. Hard cover, illustrated, 343 pages, \$79.50.

Patients with respiratory disorders jam physician waiting rooms every day. Allergic rhinitis, upper-respiratory infections, and asthma: most primary care practitioners become adept at managing these disorders. However, these same practitioners face many challenges. Respiratory problems are so common, it's easy to be lulled into making the "obvious" diagnosis when another unusual diagnosis is lurking beneath the surface. The persistent cough in a male smoker may simply be acute viral bronchitis, or it may represent the initial manifestation of sarcoidosis, bronchiectasis, or lung cancer. This does not mean that every patient with a persistent cough should receive computed tomography or bronchoscopy. The prudent family physician and general internist know when to immediately investigate a problem and when to allow time to sort things out. There are other challenges, including maintaining the balance between over-treating and under-treating respiratory conditions such as infection, asthma, and chronic obstructive pulmonary disease, and providing treatments that are supported by strong evidence in the medical literature. And, of course, primary care practitioners must strive to offer therapies that are effective, safe, and inexpensive. Sometimes a follow-up telephone call, e-mail, or office visit suffices.

In this book, Mintz navigates primary care practitioners through the evaluation and treatment of common respiratory diseases. Though not mentioned on the title page or cover, each chapter is co-authored by Mintz's colleagues at the George Washington School of Medicine, at which Mintz is director of the ambulatory care rotation in the department of internal medicine.