

**Dyspnoea in Advanced Disease: A Guide to Clinical Management.** Sara Booth and Deborah Dudgeon, editors. Oxford: Oxford University Press, 2006. Soft cover, illustrated, 271 pages, \$57.50.

In a recent book review for this journal I stated that from an educational, advocacy, and research standpoint, the respiratory care profession has given insufficient attention to dyspnea.<sup>1</sup> From a pedagogical perspective at least, the inherent complexity of dyspnea may dissuade educators from attempting to delve deeply, as respiratory care students first need to grasp the fundamentals of respiratory physiology and pathophysiology. It was my opinion that excellent textbooks like the one described in the previous review (*Dyspnea: Mechanisms, Measurement, and Management*, 2nd edition)<sup>1</sup> were more likely to serve as a useful resource for educators, who would then need to abstract general concepts regarding dyspnea and reformulate them to a level appropriate for students.

By a lucky circumstance, the recent publication of the British textbook **Dyspnoea in Advanced Disease: A Guide to Clinical Management** may have circumvented that need. This 271-page, soft-cover textbook contains 14 chapters contributed by 20 authorities in the field of dyspnea. Although written primarily by and for clinicians specializing in palliative care, I believe the textbook is accessible to both respiratory care practitioners and students.

**Dyspnoea in Advanced Disease: A Guide to Clinical Management** begins with a concise introductory chapter that covers the neurophysiologic mechanisms believed to be responsible for the generation of dyspnea. The chapter is co-authored by Schwartzstein, director of one of the only research centers devoted to the treatment of dyspnea. This is followed by an intriguing chapter on the assessment of dyspnea. Not only are topics such as physical examination, history-taking, laboratory assessment, and measurement scales succinctly described, but the chapter also addresses the complex interplay between physiological, psychological, social, and environmental factors that clinicians must master if they

are to help patients successfully manage their symptoms.

The next 4 chapters are devoted to the evaluation and treatment of dyspnea in specific disease states: heart failure, chronic obstructive pulmonary disease, advanced cancer, and neurologic disease. Dudgeon's chapter on dyspnea in advanced cancer is particularly poignant, as she describes how dyspnea exacerbates the emotional suffering and social isolation of these patients. It also underscores the importance of the chapters by Carrieri-Kohlman on the multidimensional assessment of dyspnea and nonpharmacologic approaches to its management.

A shortcoming of the book is the absence of a chapter devoted to the management of dyspnea in patients suffering from autoimmune diseases such as pulmonary fibrosis and systemic lupus erythematosus. However, I was pleased to see that the editors included a chapter specifically devoted to children, particularly those with cystic fibrosis and terminal cancers. Liben, who is the director of palliative care at Montreal Children's Hospital, does a masterful job in categorizing the pediatric population according to disease states and then organizing dyspnea by contributing causes and treatments. What I found particularly interesting was Liben's discussion on utilizing nonverbal cues (such as facial expressions) to diagnose dyspnea in very young children. With further research this technique eventually may have implications for the treatment of dyspnea and patient-ventilator asynchrony in acutely ill adults who also cannot communicate.

The second half of the book addresses a number of issues, including respiratory muscle function, rehabilitation strategies, oxygen therapy, surgical interventions to improve dyspnea, pharmacologic interventions, and nonpharmacologic approaches to the management of dyspnea. Unfortunately, the chapter on the role of respiratory muscles in dyspnea is disappointing. Although it includes some interesting data on fatigue, overall the writing is poorly focused and provides an insufficient foundation of knowledge of skeletal muscle physiology. Pulmonary rehabilitation is structured as an overview that

covers the necessary components of an effective rehabilitation program and an evidence-based summary of the benefits of such programs. The first few sections of the chapter on oxygen therapy provide a nice literature review, although the respiratory therapist can skip over the later sections on practical aspects of oxygen therapy.

The chapter on pharmacologic interventions focuses primarily on the role of opioids in the treatment of dyspnea in different diseases, and also reviews some of the evidence from clinical trials. Drain and Wells provide a succinct, well-organized discussion of surgical treatments to relieve dyspnea in patients with thoracic malignancies. Carrieri-Kohlman's chapter on nonpharmacologic treatments for dyspnea is one of the best chapters in the book, if for no other reason than it shows a wonderfully humane approach to working with patients by empowering them to manage their symptoms and to help assuage their suffering during each stage of their disease, from the active-and-stable phase to their death bed.

Finally, the editors contributed a summary chapter on the palliative approach to dyspnea that ties together the essential elements of a care plan for patients with advanced disease. **Dyspnoea in Advanced Disease: A Guide to Clinical Management** is a fine addition to the body of literature on the management of dyspnea. It is a practical guide, written in a very accessible style, and is very reasonably priced. Respiratory therapists who work in the palliative or chronic care setting will find it particularly useful, as will educators seeking a text that presents a complex topic as elegantly as possible. It will also be helpful to any practitioner interested in obtaining a better understanding of dyspnea and its treatment.

**Richard H Kallet MSc RRT FAARC**  
Respiratory Care Services  
San Francisco General Hospital  
University of San Francisco  
San Francisco, California

The author reports no conflict of interest related to the content of this review.

## REFERENCES

1. Kallet RH. [Book review of] *Dyspnea: mechanisms, measurement, and management*, 2nd edition. Mahler DA, O'Donnell DE, editors. *Respir Care* 2006;51(2):299.

**Interstitial Lung Diseases: A State-of-the-Art Series.** Dario Oliveri, editor. (Reprint of *Thematic Review Series* published in *Respiration*, 2004, volume 71, issues 1–5 and 2005, volume 72, issue 1). Basel, Switzerland: S Karger. 2005. Soft cover, illustrated, 83 pages, \$34.75.

Interstitial lung disease (ILD) is a very broad topic that poses diagnostic and therapeutic challenges to physicians in the midst of recent and emerging insights into its management. The most important skills for physicians with an interest in ILD are how to elicit a thorough medical history (which should include family medical history, exposures to drugs, environmental factors at work and at home, and hobbies), prompt diagnostic intervention, appropriate interpretation of results, and recognition of patterns in high-resolution computed tomography (HRCT) of the chest, pulmonary function testing (PFTs), and surgical lung biopsy. An accurate ILD diagnosis can be achieved with dynamic interactions between the clinician, radiologist, and pathologist.

This *Thematic Review Series* book provides up-to-date information to the clinician confronted with the challenges of diagnosing ILD. The first 3 chapters focus on the diagnostic tests. The subsequent 3 chapters discuss specific ILDs, including iatrogenic (drug and radiation induced) ILD, rare infiltrative lung diseases, and the extrapulmonary presentation of sarcoidosis. Each chapter provides an in-depth study of its topic and incorporates the latest data and citations. The busy clinician in practice may at times be overwhelmed with this book's in-depth details and might be tempted to skip paragraphs to get to the relevant clinical aspects.

The book is by no means intended to cover all categories of ILD, as only specific topics are addressed. Thus, the reader will need to look up other resources for comprehensive review of many specific ILD topics. Chapter 1 provides an overview of the use of HRCT for diagnosing ILD. Though this detailed technical discussion would be of interest to radiologists, HRCT techni-

cians, and students who are researching the topic, internists and pulmonologists may not benefit from reading many of the technical details discussed here, for day-to-day patient management. For the clinician this chapter gives an excellent description of various HRCT patterns and relates those patterns to specific diseases. The clinician might have gotten a better appreciation for the importance of the various HRCT patterns if the images had been displayed next to one another rather than placed on separate pages.

Chapter 2 discusses the utility of invasive diagnostic modalities for diagnosing diffuse lung disease; the chapter focuses on the role of bronchoalveolar lavage, transbronchial lung biopsy, and surgical lung biopsy in both immunocompetent and immunocompromised patients. The discussion is well written and easily understood; the algorithms provided are particularly useful for physicians in training.

Chapter 3 is a relatively short chapter on pulmonary function testing in the diagnosis and follow-up of ILD to monitor disease course and therapeutic response. Internists, pulmonologists, and respiratory care providers will find this chapter useful. The acronym for idiopathic pulmonary fibrosis is commonly "IPF," but in this chapter it is referred as "HPF"; that may simply be an oversight. In addition, nonspecific interstitial pneumonitis and usual interstitial pneumonitis are stated to represent the 2 different forms of IPF, but that is debatable. The current classification system, reached by an international consensus and published as joint statements by the American Thoracic Society and European Respiratory Society, have those as separate and distinct entities.

The section on the utility of residual volume, total lung capacity, and functional residual capacity might have been improved with illustrations. I think the illustrations of cardiopulmonary exercise testing may be difficult to follow for a reader who is not involved in interpreting such tests.

The chapter fails to state the importance of adequate respiratory muscle strength for respiratory mechanics and the impact of muscle weakness on pulmonary function testing. Diseases such as connective tissue disorders (eg, systemic lupus erythematosus, dermatomyositis) can cause respiratory muscle weakness and thus may affect measurements of inspiratory effort, maximum voluntary ventilation, and spirometry values.

Chapter 4 gives a detailed review of drug-induced and radiation-induced ILD.

The overall pulmonary adverse effects of individual drugs are not discussed in any length, but the authors discuss various ILD patterns as the presenting condition (eg, ILD and respiratory failure, diffuse alveolar hemorrhage, bronchiolitis obliterans) and the drugs associated with particular patterns. There is particular emphasis on amiodarone-induced pneumonitis. This chapter will be useful to the practicing pulmonologist, because the differential diagnosis and evaluation of drug-induced ILD is adequately covered.

Chapter 5 summarizes some of the rare ILDs (eg, pulmonary alveolar proteinosis, inherited lipidoses, amyloidosis, pulmonary alveolar microlithiasis) and discusses their pathophysiology, symptoms, diagnosis, and treatment. This chapter will be a good reference for physicians and students. The acronym "IPO" used in this chapter presumably refers to "pulmonary ossification," but it is unclear whether the "I" in "IPO" stands for "interstitial" or "idiopathic." Regardless, IPO is not a widely used acronym and not familiar to the vast majority of pulmonologists and/or respiratory care providers.

Chapter 6 is a short chapter that discusses the Sarcoidosis Clinic of Milan's experience with extrapulmonary sarcoidosis; the discussion focuses on incidence rates, presenting symptoms, and possible reasons for delayed diagnosis. This chapter targets internists who may encounter patients with nonspecific symptoms in the setting of sarcoidosis, and it emphasizes the consequences of a delay in diagnosis.

In essence, this series of chapters is clinically relevant to respiratory care providers, physicians, and radiologists interested in an update on a few selected topics in ILD.

**Steve T-Y Yang MBBS**

Department of Respiratory and Critical Care Medicine  
Singapore General Hospital  
Singapore

**Ganesh Raghu MD**

Division of Pulmonary and Critical Care Medicine  
University of Washington  
Seattle, Washington

The authors report no conflicts of interest related to the content of this review.