

researchers in the field of mucus-clearance disorders.

Mark R Elkins BPhy MHS
Department of Respiratory Medicine,
Royal Prince Alfred Hospital
Sydney, Australia

Recent Advances in the Pathophysiology of COPD. Trevor T Hansel and Peter J Barnes, editors. (*Progress in Inflammation Research* series, Michael J Parnham, series editor). Basel: Birkhäuser Verlag. 2004. Hard cover, illustrated, 231 pages, \$169.

Until recently, research into chronic obstructive pulmonary disease (COPD) had been neglected, as compared to the efforts expended to address issues in asthma. This small multi-author text, edited by Trevor Hansel and Peter Barnes, is another welcome sign that COPD is beginning to receive research attention appropriate to its growing public health importance. The book is a compilation of 12 chapters that cover a broad range of COPD issues, each prepared by an expert or experts in the field. Topics range from the genetics of COPD, in the first chapter, to the new drugs for COPD, based on advances in pathophysiology, in the last. The information presented is suitable for a small audience of respiratory-interested readers; the information is somewhat removed from the clinical setting, despite its chapters on "Lung Function in COPD" and "Computed Tomography Scans in COPD," and would seem to target researchers and research students in the subject. As part of the *Progress in Inflammation Research* series, it has a place in every COPD researcher's library.

Each chapter provides an overview rather than an exhaustive review of its subject, with chapters averaging 20 pages, including references (approximately 50 references in most instances). Chapter 1 offers a review of COPD phenotypes, approaches to identify susceptibility genes, candidate genes studied in COPD, and the future of genetics of COPD. In other words, it explains the basics, states our current knowledge, and gives us perspectives—the approach taken throughout the book. The chapters on pathology, lung function, and computed tomography cover a more general view of the issue.

The next 3 chapters, "Oxidative Stress in COPD," "Proteinases in COPD," and "Mucus Hypersecretion in COPD," are

specifically related to the role of products released from inflammatory cells, and also enzymes, mediators, and inhibitors in COPD.

The next 2 chapters review 2 research and clinical technologies that are widely used to assess respiratory inflammation: bronchoalveolar lavage and induced sputum collection and examination. There is also a chapter about a more recently developed, noninvasive way to monitor lung inflammation: the assessment of exhaled gases and condensates, including nitric oxide and exhaled breath condensate.

Chapters on systemic features of COPD and pulmonary rehabilitation offer clinically pertinent information, though the former is more closely linked to inflammation issues than the latter. The concept of COPD as a disease not limited to the lung parenchyma but also having systemic features is welcome in a book on inflammatory mechanisms of lung disease.

The last chapter, "New Drugs for COPD Based on Advances in Pathophysiology," describes the need for new drugs and the rationale for them, and, based on the pathophysiology of COPD, identifies potential targets for novel pharmacotherapies. Smoking cessation, immunosuppressants, antioxidants, inducible nitric oxide synthase inhibitors, inhibitors of cell signaling, protease inhibitors, mucoregulators, leukotriene B₄ (LTB₄) inhibitors, adhesion-molecule blockers, anti-fibrotic therapy, and alveolar repair all receive attention. This review of the current alternatives and the future directions is a great conclusion to the book.

Despite its virtues, one limitation of this book should be noted. As good as its text is, the illustrations are minimal and in most chapters limited to simple black-and-white diagrams. This paucity of illustrations is striking in some chapters. The chapter on computed tomography in COPD has just 2 small images. The chapter on pathology has none.

Marcelo Tadday Rodrigues MD
Kenneth R Chapman MD MSc
Asthma Centre and Pulmonary
Rehabilitation Program
Toronto Western Hospital
University Health Network
University of Toronto
Toronto, Ontario, Canada

Essentials of Pediatric Intensive Care. Charles G Stack FRCA and Patrick Dobbs FRCA. London: Greenwich Medical Media/Cambridge University Press. 2004. Soft cover, 241 pages, \$24.99.

The handbook **Essentials of Pediatric Intensive Care**, by Charles Stack and Patrick Dobbs, is described by the authors as a guide for those practitioners who do short-term rotations in caring for critically ill children or who look after children transiently before the children are transferred to a pediatric intensive care unit (PICU). The book is divided into 3 sections, beginning with the section on the basic precepts of pediatric critical care, followed by a section on specific problems encountered in the PICU. The book closes with a guide to medications commonly used in the PICU.

The greatest challenge for a reviewer is to attempt to read the book with the eye of the intended audience. This is made more challenging when the field practiced by the reviewer is reduced to a handy compendium designed for the novice to pull from a white coat and reference. I fear I may have been unable to put aside my fondness for the complexity of the field, and so my review may be biased from that standpoint. However, the perspective of a novice demands that a handbook should guide not simply by reviewing the field, but by encouraging investigation when the handbook may not be a sufficient source.

The first section, on basic concepts in pediatric critical care, includes chapters on the physiologic and anatomical differences between the young and old, neonatal problems in the PICU, resuscitation, trauma, airway and ventilation, circulation and rhythm disturbances, sedation and analgesia, fluids and electrolytes, transportation, and the death of children. These chapters represent a fairly well-rounded introduction to the broad principles encountered in the PICU.

In the first chapter, "Differences Between the Child, the Neonate and the Adult," the authors review respiratory, cardiac, neurologic, and other physiologic and pharmacologic differences between these groups. Although in this short chapter the authors list many of the important differences between the 3 age groups, in the attempt to present these principles as a collection of lists, the inherent summarizing simplifies complex principles and drains controversy and debate from the subject.

The following chapter, on neonatal problems, is brief; it enumerates some of the

important diseases that premature and term infants face. This chapter demonstrates the main shortcoming of this section of the book; that is, the attempt to reduce the principles of pediatric critical care to a group of lists renders the material quickly accessible, and in general the lists are fairly thorough, but the lists do not provide the reader with any of the controversy or subtlety of the principles they describe, especially for the reader who may lack experience or a strong knowledge basis. Hence, I think the attempt at convenience and accessibility also does a disservice to the reader. It is perhaps for this reason that *The Harriet Lane Handbook*, a well established pediatric handbook, has continued to grow longer over the past decade or so; the current (17th) edition runs around 1,168 pages.

The chapters on resuscitation, trauma, respiratory and cardiovascular principles, sedation, fluid and electrolytes, and nutrition emphasize lists of how to begin and end the approach to these problems. There are flow charts on advanced life support and resuscitation of the asystolic patient or the patient with pulseless electrical activity or ventricular fibrillation. There are also a number of tables that include etiologies of common problems, signs of such problems, and indications for various therapies for such problems. These charts and tables are well constructed and clear. This section would benefit from a brief emphasis on the importance of re-evaluation and revisions of the patient assessment and the adequacy of the care plan.

I commend the authors for including a chapter on death in the PICU. This very difficult subject is mainly approached in a clinical fashion. Again, the chapter would be more thorough with references to further resources, especially items on the psychosocial aspects of death.

The second section of the manual is devoted to a more in-depth review of pediatric critical care from an organ-system standpoint. The authors provide a greater emphasis on physiologic principles that underlie the practice in this section. The main difficulty for the novice reader is how to round out the information provided in this section. For instance, in the chapter on cardiac disease the authors introduce and summarize the most common congenital cardiac defects and clinical issues that arise following cardiopulmonary bypass. Although the authors do provide an outline of the care of these problems, it is hard to imagine the

inexperienced clinician relying solely on this manual as a guide to managing such patients. For instance, hyperventilation, nitric oxide, prostacyclin, and sodium nitroprusside are offered as therapies for post-bypass patients with hypertensive crises. There is, however, no way for the reader to evaluate the merits or potential complications of these treatments. So, this chapter provides a convenient introduction for a student who plans to access more rounded approaches to the subject.

In contrast, the chapter on neurologic and neuromuscular disease is replete with tables that range in subject from the Glasgow Coma Scale to causes of unconsciousness and coma, as well as types and causes of status epilepticus, among others. There are decision flow charts for the management of the unconscious child and status epilepticus. The relative thoroughness of this chapter may reflect, at least in part, the nature of the subject, which lends itself more readily than cardiac or respiratory physiology to being summarized in a group of lists.

This second section also includes chapters on gastrointestinal and hepatic diseases; renal, hematologic, and oncologic diseases; endocrine and metabolic disorders; infections; trauma; poisoning; as well as neonatal and surgical issues. The renal chapter concentrates on renal therapies as well as briefly emphasizing renal diseases. The hematology/oncology chapter covers sickle cell disease, leukemias, bone-marrow transplantation, and solid tumors. The chapter on infectious diseases and related illnesses covers meningococemia, human immunodeficiency virus, and systemic inflammatory response syndrome. The trauma and poisoning chapters are fairly thorough for a handbook.

The third section is a compendium of medications commonly employed in the PICU. The medications are listed alphabetically rather than by class. The list includes class of the agent, usage, dosage, contraindications/warnings, and adverse effects.

Essentials of Pediatric Intensive Care approaches the major rubrics of pediatric critical care but founders on its attempt to take a physiology-based field of endeavor and reduce it to a series of lists. The manual tries to do too much in too little space, without reference to other sources that may be of value for the intended audience. Additionally, there are inconsistencies in some chapters in the construction of the headings and subheadings, demonstrating poor editing

and making the book less convenient than its authors intended.

The manual appears to be best suited as a brief introduction to pediatric critical care, until the practitioner is able to access a more definitive resource. **Essentials of Pediatric Intensive Care** does not appear adequately constructed as a safe guide for novices in the practice of pediatric critical care.

Thomas V Brogan MD

Pediatric Intensive Care Unit
Children's Hospital and Regional
Medical Center
Department of Pediatrics
University of Washington
Seattle, Washington

Difficult Conversations in Medicine. Elisabeth Macdonald, editor. Oxford UK: Oxford University Press. 2004. Soft cover, 231 pages, \$39.95.

The stated aim of this book is to support an initiative put forth in the year 2001 by the Forum on Communication in Health-care of the Royal Society of Medicine. This forum identified the need to develop a core curriculum about communication for physicians. The stated audience is physicians and "other health care professionals in the early years of medical practice, to help them polish their communication skills and to avoid pitfalls, mistakes, or simply embarrassment on either side."

There are 16 chapters in the book. The editor wrote or co-wrote 9 of the chapters. The editor states the book was written because public confidence in the United Kingdom has been undermined by a "series of failures and accidents in an unfortunately wide variety of medical specialties." There have been closures of health-care facilities and "disastrous results of heart surgery in children." A summary of these events would have been nice for those unfamiliar with the health-care situation in the United Kingdom. She does go on to say that these events led to the Bristol report, which made recommendations about health-care standards and communication, but it's a weak link.

While the book's stated audience is physicians and other health-care professionals, it is written for physicians only. There is a reference to nursing from time to time, but soon the subject is returned to doctors and junior doctors. There was no reference to respiratory therapists. The types of conversations covered were typical of patients and physicians, not other health-care profession-

In: Essentials of Pediatric Intensive Care. Second Edition. Levin DL, Morriss FC (Eds).¹ Pediatrics 2001; 108:735-740. 193. Harris G, Fiordalisi I: Physiologic management of diabetic ketoacidemia: A 5-year prospective pediatric experience in 231 episodes. Arch Pediatr Adolesc Med 1994; 148: 1046-1052. 194. Koves IH, Neutze J, Donath S, et al: Improving our estimate of dehydration in DKA. ² Cases may require intensive care unit admission for cardiac and/or respiratory support ³ Polymerase chain reaction testing for SARS-CoV-2 may be positive or negative ⁴ Early recognition and specialist referral are essential, including to critical care if warranted ⁵ Immediately report cases to the New York City Health Department's Provider Access. ⁶ Pediatric Intensive Care Society. PICS Statement: Increased number of reported cases of novel presentation of multi-system inflammatory disease. April 27, 2020. Available at <https://picsociety.uk/wp-content/uploads/2020/04/PICS-statement-re-novel-KD-C19-presentation-v2-27042020.pdf>. required blood pressure support and five required mechanical ventilation. No fatalities have been reported among these cases. Minimum Pediatric Care Standards for New York State Hospitals, Emergency Departments and Intensive Care Units. 2015 GUIDANCE DOCUMENT. ⁷ In particular, it is essential that where pediatric patients are cared for in hospital based ambulatory surgical settings, staff have ongoing training and competency in pediatric resuscitation such as can be received through PALS. In addition, to optimize the comfort and safety of pediatric patients undergoing surgical procedures, expertise in pediatric anesthesia and sedation should be utilized for these patients. Open Journal of Pediatrics & Neonatal Care. Research Article. Sars-Cov2 Infection: Clinical Approach in. Pediatric Intensive Care Unit - Vanessa Costa. 1. ⁸ Children in intensive care are infected only with SarsCov2 but coinfection with other pathogenic agents such as virus (Influenzae A and B, Parainfluenza, Adenovirus, Rhinovirus, Bocavirus), bacteria (Pneumococcus, Staphylococcus, H. Influenza, Mycoplasma pneumoniae) or fungi (particularly in patients under immunosuppressive therapy) occur in approximately 40-50% of the cases and also in patients with PIMS-TS. ⁹ A disciplinary and experienced team is essential to the objectives of the interventions and subsequent follow-up. REFERENCES.