recognized experts in the field to author 19 chapters that are divided into 3 sections: techniques and technical issues; airway anatomy and abnormalities; and flexible bronchoscopy for specific clinical conditions. Although the international authorship, with a predominance of European authors and editors, led to some spellings that differ slightly from those used in the United States, this 212-page text is easy to read, very well organized, and carefully edited. Each chapter is comprehensively referenced with up-to-date publications that support its contents. In addition, contact information for the primary author of each chapter is provided at the conclusion of the reference section of each chapter. The target audience is pediatric pulmonologists and otolaryngologists, particularly pediatric pulmonary medicine trainees and those new to fiberoptic flexible bronchoscopy. It will also serve as an excellent review for respiratory therapists who assist in the procedure.

A major strength of this text is the large number of high-quality photographs and illustrations throughout. The editors did a particularly good job of including excellent photographs of both normal anatomy and examples of the vast majority of both common and unusual entities. Furthermore, this text includes access to an innovative online repository of 48 high-quality videos of normal and abnormal anatomy. These are particularly useful to the clinician or assisting technologist new to flexible bronchoscopy, because common dynamic airway abnormalities (eg, tracheomalacia and laryngomalacia) can be difficult to appreciate from still photographs.

The first chapter, authored by Bush, provides an excellent overview of the rationale and indications for bronchoscopy in children with undiagnosed respiratory disease. Subsequent chapters in the first section detail pediatric bronchoscopic procedures, the clinical and research indications, and the necessary equipment. The chapter on currently available bronchoscopes and image acquisition and processing equipment will be very useful to clinicians and therapists who wish to establish new or modernize existing pediatric bronchoscopy programs. One chapter thoroughly reviews medications and monitoring protocols that reflect the current internationally recognized standard of care for sedation and anesthesia in pediatric bronchoscopy, and potential complications. The chapter on rigid bronchoscopy and the frequent references to rigid bronchoscopy throughout the text, are quite useful. Although rigid bronchoscopy is typically performed by otolaryngologists, flexible and rigid bronchoscopy are often complementary, so the pediatric pulmonologist must understand both.

Bronchoalveolar lavage indications and conduct as a technique to rule out lower-airway or alveolar infection is nicely reviewed. However, a limitation of this chapter is the relative paucity of data or opinion on bronchoalveolar lavage in immunocompromised children to diagnose opportunistic infections. For instance, there is little discussion of the strengths or weaknesses of evolving molecular approaches (eg, polymerase chain reaction or galactomannan assay) for diagnosing pulmonary fungal disease in immunocompromised children. Furthermore, there is little discussion about the diagnosis of pulmonary nodules in immunocompromised children, which is a relatively common problem in tertiary-care centers. Two chapters are dedicated to the discussion of specialized and more invasive procedures, including endobronchial and transbronchial biopsies, and endobronchial ultrasound. Although these procedures are currently performed primarily in adults, when the equipment is further improved and miniaturized, it is likely that their utility in children will increase.

An excellent chapter discusses the indications for and performance of flexible bronchoscopy in the intensive care unit, with a review of the safety issues, including the potential detrimental effects on ventilation during bronchoscopy through an established endotracheal tube. Wood authored a very practical review of the whole-lung-lavage technique, which is a potentially life-saving non-bronchoscopic method to clear excessive proteinacious debris, and which pediatric pulmonologists, intensivists, anesthesiologists, and respiratory therapists may be asked to assist with in the management of children with alveolar proteinosis.

The second section includes chapters on normal airway anatomy and congenital and acquired airway abnormalities in children. Overall, these chapters are well written and illustrated and will be very useful to pulmonary medicine trainees. However, the photographs of lower-airway lesions are of much higher quality than the photographs of upper-airway lesions.

The final section reviews the utility of bronchoscopy in the management of various important specific clinical conditions, specifically, atelectasis, plastic bronchitis, suppurative lung diseases such as cystic fibrosis and primary ciliary dyskinesia, endobronchial tuberculosis, and lung-transplant recipients. These well written chapters should prove useful to trainees and experienced clinicians alike. The final chapter is an eloquent review of the history of flexible fiberoptic bronchoscopy in children, authored by Wood, the "father" of pediatric fiberoptic bronchoscopy.

The primary intended audience seems to be pulmonary medicine and otolaryngology trainees, although experienced pulmonologists will also find many chapters quite useful. The book is also well suited for respiratory therapists and nurses who assist in pediatric fiberoptic bronchoscopy. The text is succinct, well organized, and has high-resolution photographs throughout, which will provide any interested clinician an excellent and efficient introduction to or review of the art of pediatric flexible fiberoptic bronchoscopy.

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Paediatric Intensive Care. Peter Barry, Kevin Morris, Tariq Ali, editors. (*Oxford Specialist Handbooks in Pediatrics* series.) Oxford: Oxford University Press. 2010. Soft cover, 896 pages, $79.50.

Paediatric Intensive Care is a concise yet broad-based, fundamental resource for those encountering critically ill children. The book is well suited for its target readership, which is stated to include primary pediatricians, emergency-department staff, pediatric intensive-care trainees and consultants, anesthetists, nurses, and paramedics.

The editors "aimed to provide a comprehensive, practical guide to the care of the critically ill child, both on an intensive care unit and in other clinical areas…. It is a book to be picked up to find answers to specific problems and for guidance on how to manage specific issues." The book does indeed fulfill these objectives exceptionally well.

Pediatric Intensive Care is partitioned into 4 sections, which proceed in a logical sequence: Introduction to Pediatric Intensive Care; Organ System Support and Related Practical Procedures; Specific Specialties; and Compassionate and Family Centered Care. An appendix and index are also included.

Section 1 provides an overview of the development of pediatric critical care as a specialty and describes its role in current medical practice. It includes sections on basic medical stabilization, principles and fundamentals of physiologic monitoring, and diagrams and descriptions of typical invasive procedures. The information is succinct, practical, and would be an easily reviewed format for upcoming certification examinations.

Section 2 is a thorough review of basic medical support, including airway and respiratory support, sedation and analgesia, issues encountered in general anesthesia, circulatory support, cardiac-bypass fundamentals, interpretation and correction methods for electrolyte imbalance, and basics of renal-replacement therapies and nutritional support. Each of these topics is presented with a brief discussion of the physiology, followed by either bullet-point or decision-tree formatted diagnostic and treatment plans. The section on medical transport includes practical information of high-altitude physiology and an infrequently approached subject: adverse events during transport. Again, the text is an excellent reference for specific questions (sodium correction, comparison of bypass circuits, how to manage peritoneal dialysis).

Section 3 provides more detail and current description of the major tertiary disciplines, including pulmonary medicine, congenital cardiac disease, gastroenterology and hepatology, nephrology, genetics and metabolism, hematology, trauma, and others. As an example, the chapter on congenital cardiac disease and postoperative management is a superb overview of typical structural lesions, accompanied by easily understood diagrams, followed by concise diagnostic and management recommendations. Somewhat novel chapters include those on neurocritical care, laboratory investigations of infectious disease, organ donation, and death and critical care in the developing world. Another helpful chapter provides a quick reference on neonates in the pediatric intensive care unit.

Section 4 includes helpful discussions of end-of-life care, consent and assent issues, and risk management.

The appendix includes helpful tables of normal values, age- and size-appropriate equipment standards, and resuscitation suggestions. The index easily refers the reader to appropriate sections.

The book is easily read, and has important text boxes with, for instance, differential diagnoses and comparison tables, which are set off with shaded background for easy scanning. The diagrams are uncluttered, clear, and well labeled. Unique about this text is that it includes unusual, difficult-to-find information from a wide variety of areas, including such things as calculation of the optimal number of intensive-care-unit beds, altitude effects on alveolar gas, and peritoneal dialysis solution content.

The authors are from the United Kingdom, so some aspects are not applicable in other countries. As examples, some of the medications (eg, paracetamol) and legal issues mentioned are of interest, but the reader may need to rely on regional sources for such information.

The text has a few shortcomings. There is no chapter on oncology, and no material on delirium and intensive-care-unit psychosis. The references (listed after each chapter) are limited but generally quite current. In general, an in-depth review of a subject, such as the role and regulation of inflammatory cytokines in the pathogenesis of sepsis, will not be found in this book, as this was not the stated intent in compiling it.

In summary, **Paediatric Intensive Care** is an excellent text for basic pathophysiology, diagnostic pathways, and management guidelines. It is well suited for its target audience and serves as a ready reference for urgent or difficult critical-care questions. It was the only critical-care text I brought on a medical outreach trip to China, and the Chinese physicians specifically asked for this book for future use. The rest of my medical team intends to purchase personal copies. No more enthusiastic or genuine endorsement of this text's quality can be found.

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