
Atopic diseases such as asthma, allergy, and anaphylaxis are important and growing problems in the pediatric population. Discoveries of the mechanisms of development of atopic and primary immunodeficiency diseases are among the success stories in the field of pediatric allergy/immunology. In addition, therapies for atopic and primary immunodeficiency diseases have recently undergone exciting new changes. Given the groundbreaking nature of these scientific and therapeutic breakthroughs, it is strange that until now there has not been a reference book dedicated solely to the field of pediatric allergy. The goal of the editors of this textbook was to document and summarize the numerous recent changes in the field of pediatric allergy/immunology. Leung et al have fulfilled their goals admirably filled a void in the allergy literature.

This textbook includes 60 well defined chapters. Topics include basic immunologic mechanisms of disease, primary immunodeficiencies and their therapies, diagnosis and treatment of allergic diseases, upper airway disease, asthma, food allergy, skin and eye disorders, and drug allergy/anaphylaxis. The breadth of coverage is impressive and complete. The book’s organization assists in its readability. Each heading is subdivided into several chapters, allowing for full discussions of the topics.

Rare diseases such as eosinophilic gastroenteritis and autoimmune lymphoproliferative disease receive complete discussions. The section on food allergies includes chapters on “Prevention and Natural History of Food Allergy” and “Approach to Feeding Problems in the Infant and Young Child,” which are often missed in adult allergy reference books. In addition, the authors and editors placed new emphasis on some topics, making the discussions particularly appropriate to pediatrics. One such chapter is “Asthma and the Athlete,” in which the emphasis is on controlling baseline asthma rather than on episodic use of quick-relief medications. This approach allows for the spontaneity of childhood play, because asthma can be difficult to pre-treat with β-agonists.

The book’s target audience is physicians practicing in allergy/immunology, but the practicing pediatrician will find this an excellent reference as well. Nurses and allied health practitioners will appreciate the patient education references and Web site links for specific topics. The strengths of this book include conclusion tables (at the end of each chapter) entitled “Key Concepts,” which are excellent for quick reference. In addition, the text is replete with outstanding treatment algorithms. Tables of the differential diagnoses of specific disease processes are found in most chapters dedicated to diagnosis and treatment. These tables will be useful to both the pediatric and internal medicine-trained allergist who cares for children. Another strength of Pediatric Allergy: Principles and Practice is how readable and clear it truly is.

My favorite chapter was Chapter 57, “Drug Allergy.” Extensive algorithms, skin-testing procedures, and desensitization protocols make this chapter a treasure trove of information for the practicing allergist. The surprising up-to-date Web site references throughout the text are also greatly appreciated. In addition, the food allergy appendix is particularly helpful as an education tool for patients.

The editors found superb authors for most chapters. In particular the chapters on complement deficiencies and epidemiology of allergic diseases were highly readable and maintained a clinical rather than basic science approach. The editors also included provocative chapters on gene therapy and stem cell therapeutics, which are currently only treatment possibilities of the future, but because of their high degree of promise and the ethical considerations involved in their use I found myself appreciating their inclusion in the book. The only chapter that failed to fulfill its promise is the one on Epstein-Barr virus; justification for its inclusion in the textbook was not clearly delineated.

Each chapter’s author strove to reference the best pediatric studies. In fact, whenever possible, the authors did an admirable job of avoiding referencing adult studies. The pediatrics adage that “children are not just little adults” was heeded throughout the book. References are well balanced between classic, landmark reports, and new studies. In addition, the index allows for quick referencing, as it is very complete. Rare syndromes are included in the index, and major subjects such as rhinitis are sub-indexed for easy finding of specific topics.

However, I did find myself repeatedly wishing for a table (at the end of each chapter or in the appendixes) of dosages of the medications mentioned by chapter authors. That bit of additional organization would have made the book much more handy for the practicing clinician. In addition, the chapters on the basic science underlying various topics were quite dense, and summary tables at the end of each subsection often strengthened the readability of these chapters.

This textbook is surprisingly inexpensive, considering its depth and breadth. It is certainly a competitive price compared to such adult allergy reference tomes as Middleton’s Allergy: Principles & Practice or Patterson’s Allergic Diseases.

In summary, Pediatric Allergy: Principles and Practice is an outstanding reference book that deserves to be in the library of every practicing pediatric allergist/immunologist and primary care pediatrician. Allied health professionals will find the patient education materials quite helpful. While delineating basic pathophysiologic mechanisms of disease, the authors retained a high degree of clinical utility. I look forward to future editions of the textbook as the field of pediatric allergy continues to evolve.

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Asthma and associated respiratory illnesses in which wheezing is a primary symp-
tom are extremely common in childhood. One third of all children are known to wheeze in the first 3 years of life, almost half doing so by the age of 6 years. Because of the prevalence of these illnesses much attention has been paid in the literature of various clinical disciplines (medicine, respiratory care, and nursing) to defining specific syndromes and their pathophysiologic origins, prognoses, and therapies. Despite the fact that developed societies have a wide array of diagnostic tools and drugs for treating asthma, the morbidity and mortality from childhood asthma and wheezing disorders continue to rise. In developing countries the importance of these illnesses may be just as great, although perceptions of their relative societal burden may be diminished by the concurrent impact of childhood infectious diseases.

To reduce the immense morbidity of childhood asthma and wheezing disorders, clinicians require an understanding not only of current epidemiologic and diagnostic trends, but also of prevention and treatment strategies. The primary target audience for this text is pediatricians, pediatric pulmonologists, and allergists, but pediatric respiratory care personnel, nurses, and asthma educators will also benefit greatly from the sections focused on their specific areas of practice.

The editor, Michael Silverman, intended to provide a comprehensive text specifically addressing childhood asthma. Despite an explosion of information regarding asthma genotype-phenotype correlations over the past few years, we still await definitive techniques to provide structural and cellular bases to differentiate asthma phenotypes. Nowhere is this more critical than in childhood asthma, in which the initial pathogenic phases may provide information that is not only prognostic for the future disease state but may also enable more targeted therapies. Pediatric asthma practitioners therefore need this comprehensive text specific to childhood asthma. Primary care pediatric texts typically have provided overviews of asthma care, with superficial discussions of phenotype-specific pathogenesis and therapy. Medical subspecialty and respiratory therapy textbooks have often provided more in-depth descriptions of adult asthma phenotypes. Like both the United States and international asthma guidelines those texts have too often made only limited attempts to bridge the substantial knowledge gap linking genotype at birth to early childhood asthma phenotype and the manifestation of disease in adult patients.

Silverman and the authors of the individual chapters are leaders in their clinical fields. Their collaborative efforts have resulted in a text that contributes greatly to pediatric asthma care. Overall, the individual chapters are written with a clear and concise style. The graphics are simple but provide additional clarity when needed and are themselves well referenced. The chapters are well organized and flow logically from discussions of the epidemiology and natural history of asthma, through asthma pathophysiology and therapies, to specific issues such as psychological factors, growth and puberty, and aspects of international health care specific to certain cultures. Each chapter is sufficiently focused and concise to be read individually. The chapters are logically subdivided and the sections are headed according to age group, pharmacotherapeutic effect, or diagnostic or treatment algorithm.

One aim of this text is to provide discussions of current best clinical practice. Support for outlined clinical approaches is provided with the best available data from human studies, and the text is thoroughly referenced with journal sources. Readers seeking references linking clinical practice recommendations to novel laboratory data from animal studies or in vitro human cellular or molecular bench research will be disappointed, as that was clearly not the book’s aim. Rather, this text focuses on results from clinical trials applicable to current clinical practice.

Some of the chapters warrant individual comment. The chapter on lung function, by Peter D Sly and Felicity S Slack, provides an excellent overview of physiology and standard pulmonary function techniques. The section on physiologic measurement in clinical situations was insightful. There has been much recent attention in the pulmonary physiology literature directed at pulmonary function testing of infants and preschool children. Since a primary focus of this text is asthma in infants and young children, I was puzzled that the discussions of rapid thoracic compression, raised-volume thoracoabdominal compression, forced oscillation, impulse oscillometry, and high-speed interrupter techniques were limited to little more than a paragraph each.

Fernando S Martinez’s chapter on the natural history of childhood asthma, which is new to the second edition, is a welcome addition. Recent epidemiologic research, to which Martinez is a major contributor, has contributed substantially to our understanding of the evolution of childhood wheezing illnesses. He provides a framework in which various forms of asthma can be differentiated: transient wheezing of infancy, persistent wheezing after respiratory syncytial virus infection, and atopy-associated asthma. Patrick G Holt provides an excellent discussion that supports maturational deficiencies in adaptive immunity as etiologic in the development of asthma. Peter N le Souëf outlines data from selected candidate gene studies and points out the many current limitations in knowledge.

Jill A Warner and John O Warner’s chapter on asthma prevention provides an excellent discussion of maternal factors that influence primary allergic sensitization and subsequent development of asthma. However, there has been a recent explosion of epidemiologic and basic science literature that supports the hygiene hypothesis. The Warners have, in fact, contributed substantially to that literature, and I was rather disappointed that it was given a relatively brief review in this chapter.

Søren Pedersen and Hans Bisgaard’s chapter is a masterful discussion of asthma pharmacology and clinical therapeutics. It ties cellular and preclinical information with pharmacokinetic and pharmacodynamic data specific to children. It is a concise yet thorough review of asthma pharmacotherapy and alone could be used by many as a reference. Another chapter co-authored by Søren Pedersen discusses inhalation therapies and aerosols. In an unbiased manner, it briefly describes various inhalers and aerosol devices, This chapter too could be used alone as a reference. Together, these 2 chapters are among the most thorough yet concise statements on current asthma management. Both are well referenced and provide an abundant source of background material.

Silverman’s chapter on wheezing disorders in infants and young children provides an elegant discussion of the epidemiology, differential diagnosis, and therapeutic strategy options for virally induced wheezing in young children. Robert Dinwiddie’s brief chapter discusses unusual syndromes and asthma complicating other disorders. Together those 2 chapters provide a comprehensive look at other wheezing disorders that may confound the diagnosis and therapy of otherwise uncomplicated asthma.
I was initially excited by the inclusion of several chapters that I thought would describe international differences in asthma epidemiology and clinical practice. I found those chapters lacking in depth, however. Some of the international authors did little more than restate basic asthma facts and did little to explain asthma management practices in their countries and regions. It was laudable that the editor attempted to provide an understanding of how various cultures view, are affected by, and respond to asthma, but to truly be of benefit those chapters need to provide substantially more information.

Overall, Silverman et al have offered pediatric clinicians a comprehensive, readable text. I believe that the work updates and substantially adds to the body of literature examining the pathophysiology of childhood asthma and provides clinicians with a framework that can help guide clinical practice.

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Respiratory Control and Disorders in the Newborn is a collection of works by an impressive group of authors representing most of those responsible for our current knowledge about normal and abnormal developmental respiratory control. There are 4 potential target populations for this collection of review articles and discussions. These are, in order of appropriateness: neonatal physicians/clinicians, researchers with a special interest in developmental respiratory control, and neonatal intensive care unit respiratory therapists and nurses.

The book’s content is broad. There are basic reviews that address the morphology of the development of the airway innervation and the neurophysiologic brain stem basis for the gasping/autoresuscitation reflex. There are also clinical discussions of sudden infant death syndrome, bronchopulmonary dysplasia, central hypoventilation syndrome, congenital disorders, and anatomical malformations of the airway. Additionally, several chapters provide important context and background information without which it would be difficult to understand the major topic of most of the chapters, apnea. Those chapters include “Chemical Control of Breathing from Fetal Through Newborn Life,” “Developmental Trend of Sleep Characteristics in Premature and Full-Term Newborns,” “Respiratory Control During Oral Feeding,” and “Metabolic and Ventilatory Interaction in the Newborn.”

The majority of the remaining chapters are in one way or another devoted to the etiology, pathophysiology, diagnosis, and treatment of apnea in the newborn infant, with particular emphasis on apnea of prematurity. Following are short reviews of several of my favorite chapters.

Chapter 5, “Upper-Airway Muscle Control During Development: Application to Clinical Disorders That Occur in Premature Infants,” is a well written, interesting discussion on the possible etiology/pathophysiology of apnea of prematurity, with a mechanistic focus on abnormal upper-airway function during development.

Chapter 11, “Apnea, Bradycardia, and Desaturation: Clinical Issues,” is a concise, straightforward review of the clinical aspects of apnea of prematurity. It is a reasonably well written, complete overview of the problem and a good place to start for the relatively uninformed.

Chapter 12, “Pathophysiology of Apnea of Prematurity: Implications from Observational Studies,” reviews the etiology and pathophysiology of apnea of prematurity. Brief segments focus on the potential role of lung volume changes, feeding and/or reflux, chest wall distortion, hypoxic ventilatory depression, and anemia.

Chapter 15, “Maturation of Respiratory Control,” provides a perspective that emphasizes the potential importance of sleep state and other respiratory system reflexes on the resolution of apneic episodes in the premature infant.

For the most part the chapters are well organized, written, and referenced. There is considerable redundancy among the chapters on apnea of prematurity, but I found this to be somewhat enlightening since it gives the accurate perception that there is not a particularly clear understanding of this common clinical problem.

In short, I found this to be an excellent, relatively up-to-date collection of articles that address both normal and abnormal developmental respiratory control. There is heavy emphasis on the most common issue, apnea of prematurity. The book should be part of the library of any neonatology or pediatric pulmonary group.

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Nothing can prepare parents for the death of a child. It is, as Barbara Rosof said, the worst loss.1 For mothers and fathers, facing the experience of their child’s severe life-threatening illness is like entering a confusing, unfair, nasty storm. No book, by itself, can part the clouds and let the sun back in. This book does not promise to make the circuitous path through the storm straight and easy, and it does not make the howling wind abate, but it does what it promises to do. It provides shelter from the storm.

Joanne M Hilden and Daniel R Tobin, who are both nationally recognized for their careers in pediatric oncology and end-of-life advocacy, have pooled their considerable talent, clinical expertise, and insight to produce this book. Their unique contribution—and the heart of this work—is their understanding that parents’ suffering and grief begin at diagnosis, not at death. About 75,000 children die in the United States each year, but many times that number are diagnosed with severe life-limiting illnesses. All of those families, regardless of the outcome of their child’s diseases, enter the storm. There are many volumes devoted to dealing with the grief and bereavement of losing a child, but this is the first that is designed to support families while they are in the storm. The book provides practical information and support in a friendly, approachable manner.

The authors acknowledge that there is a risk in preparing parents for the worst possible outcome when, in fact, it may not occur. But the risk is worth taking. Hilden explains that, “the only thing more horrible