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Preface

Pediatric Infectious Diseases

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Guest Editor

I am pleased to introduce this issue of the *Pediatric Clinics of North America* dedicated to infectious diseases. Each of the 12 articles was selected because of the importance of the subject matter from the pediatric practitioner's perspective. I am indebted to all of the authors who have done a marvelous job in summarizing a large body of material in a succinct, relevant, and accessible fashion.

Because pediatricians know better than any other group of physicians that "an ounce of prevention is worth a pound of cure," the first article in this issue deals with immunization. Drs. Cohn, Broder, and Pickering, all from the Centers for Disease Control and Prevention, provide a spectacular summary of the state of immunization in the United States. In addition to developing a more full appreciation of the tremendous accomplishments of the national immunization program, the reader will learn a great deal about immunization policies, safeguards, challenges, and emerging strategies.

The second article of this issue, authored by Cody Meissner, underscores the impact of respiratory viruses on infants and young children. Dr. Meissner reminds us of the enormous burden of pediatric illness attributable to respiratory syncytial virus and influenzaeviruses and warns us of the coming influenza pandemic. This article also summarizes the important role of parainfluenza viruses, adenoviruses, rhonoviruses, and the recently recognized human metapneumovirus in childhood respiratory diseases.

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Articles three and four provide a wealth of information on the diagnosis and management of two of the most common infections managed in pediatricians' offices: otitis media and pharyngitis. Dr. Pelton provides a thoughtful point of view on the diagnosis, management, and outcome of acute otitis media in the current era of universal conjugated pneumococcal vaccination. Dr. Gerber carefully leads us through the approach to the diagnosis and treatment of pharyngitis in children. Much has changed (eg, strategies for diagnostic testing), but much remains the same (eg, antimicrobial therapy for streptococcal infection).

Gastrointestinal pathogens are an important cause of morbidity and mortality among children around the world. Dr. Amieva's article on important bacterial gastropathogens teaches us how appreciating basic pathogenesis facilitates understanding the clinical courses of different illnesses and leads to the development of prudent management strategies.

Articles six and seven deal with serious infections in childhood that usually lead to hospitalization. Dr. Gutierrez's article on bone and joint infections represents a succinct and timely analysis of the pathogenesis, epidemiology, clinical manifestations, diagnosis, management, and outcome of osteomyelitis and septic arthritis in children. The increasing prevalence of community-acquired methicillin-resistant staphylococci, noted by Dr. Gutierrez in reference to bone and joint infections, also is critical to appreciate in managing other infections that might be caused by *Staphylococcus aureus* (eg, skin and soft tissue infections). Drs. Chavez-Bueno and McCracken's article on bacterial meningitis provides a wealth of information regarding this severe and potentially life-threatening infection. The shifting epidemiology of bacterial meningitis following the introduction of effective vaccination programs against *Haemophilus influenzae* type b, *Streptococcus pneumoniae*, and most recently *Neisseria meningitidis* is most noteworthy. Optimal empiric antimicrobial therapy and the role of corticosteroids are other aspects of this article that are of particular interest to the reader.

Dr. Sarah Long brings her incredible wealth of clinical experience to a topic that challenges (and frustrates) many practitioners and infectious disease consultants: prolonged, recurrent, and periodic fever syndromes. Dr. Long offers a logical framework for the evaluation and management of children with these often enigmatic illnesses. Subtle clinical clues are emphasized and a measured diagnostic approach proposed.

The last four articles provide up-to-date, user-friendly summaries of antimicrobial therapy in infants and children. Dr. Kimberlin provides a valuable overview of the 18 non-HIV antiviral agents currently licensed in the United States and the 16 HIV drugs. A brief summary of each agent includes the spectrum of activity, drug resistance, pharmacokinetics and adverse effects, and clinical use. An overview of the factors governing prudent antibiotic selection accompanied by thoughtful recommendations for the therapy of children with suspected or proved bacterial infections can be found in the article authored by Drs. Ping and Bradley. Dr. Steinbach's article deals with the expanding array of antifungal drugs available for the therapy of the increasing array of fungal infections, especially prevalent in children with compromised immunity. Unfor-

tunately, as is true of many biologics used in children, much of the data on the pharmacology, toxicity, and use of these drugs is derived from studies conducted in adults. The shortfalls of data specific to infants and children is emphasized by Dr. Steinbach, and interim dosing recommendations are provided. Recommendations for antiparasitic therapy in children are contained in the article by Drs. Moon and Oberhelman. The detailed table outlining the drugs of choice for common parasitic infections worldwide will be of particular value to practitioners who provide care to international patients or those returning from parts of the world where parasitic infections are endemic. Few of us can recall the drugs of choice and dosages of these valuable medication; this article does it all.

In summary, the authors of this issue of the *Pediatric Clinics of North America* offer a wealth of information relevant to the recognition and management of infections commonly encountered in pediatric practice. These articles will serve as an excellent reference for years to come.

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