



From Infancy to Adolescence: Infectious Disease Pearls for the Pediatric Provider

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Pediatric clinicians still grapple with infectious diseases every day. Vaccinations are a cornerstone of well childcare. Acute infections account for many daily office visits. Complicated infections compromise long-term health. Fortunately, there have been advances in our understanding, diagnosis, management, and prevention of even common infections. The articles in this issue of *Pediatric Annals* provide updates on infectious diseases faced frequently by health professionals caring for children.

Common infections are still common. In the first article, “Acute Otitis Media and Group A Streptococcal Pharyngitis: A Review for the General Pediatric Practitioner,” Dr. Jason H. Homme reviews basic proven approaches to children with either pharyngitis or otitis media. Clinicians are reminded to follow evidence-based guidelines that are proven to be effective. Standardizing care of these common illnesses helps patients recover and avoids unnecessary costs and complications of overtreatment.

Bronchiolitis frightens parents and harms children, especially during winter months. In the second article, “Respiratory Syncytial Virus: Spectrum of Clinical Manifestations and Compli-

cations in Children,” Dr. Christina A. Rostad highlights the need for more aggressive approaches to the prevention of respiratory syncytial virus (RSV) infections in infants and children. Identified as the leading cause of lower respiratory tract disease in these populations, RSV is not only associated with significant global childhood mortality, it also places an enormous financial burden on the health care system, and we remain without an effective vaccine for prevention. A must-read for general pediatric providers, the article reviews clinical features and complications of RSV disease in addition to exploring the link between RSV infection in infancy and its association with childhood wheezing and asthma.

In the next article, “Pyogenic Arthritis,” Drs. Jenna E. Holmen and Jumi Yi provide a comprehensive review of the literature as it pertains to the evaluation and treatment of a child with suspected pyogenic arthritis, a presentation not uncommon to both general and subspecialty pediatric providers. Special attention is given to the necessity of early diagnosis, intervention, and antimicrobial therapy to achieve optimal outcomes. Additionally, the authors provide a thorough review of the microbiology of osteoarticular infections in the pediatric

patient which, in turn, affects choice and duration of treatment. Reassuringly, Drs. Holmen and Yi detail evidence supporting early transition from parenteral to oral antimicrobial therapy, theoretically shortening the length of hospital stay and decreasing morbidity associated with prolonged parenteral therapy.

Increasingly, children are traveling the world. Whether for tourism or permanent relocation, children are on the move. In the fourth article, “Pediatric Travelers and Immigrant Children,” Drs. John C. Christenson and Hiba Chehab review the current evaluation and management for traveling children. Children planning trips can benefit from pre-travel care relating to safety, hygiene, insect avoidance, and immunization. Children relocating from anywhere in the world can benefit from focused screening evaluations and careful assessments of geography-specific conditions.

Finally, adolescents have special potential to benefit from good relational contact with a clinician. In the final article, “Sexually Transmitted Infections: Prevention, Diagnosis, and Treatment in Primary Care,” Dr. Gregg Joseph Montalto offers a helping hand to primary care providers regarding the navigation of adolescent health care. Addressing complex topics such as the provision

of confidential care, the importance of human papillomavirus vaccination, the diagnosis and treatment of urethritis and cervicitis, and sexually transmitted infections screening recommendations, Dr. Montalto highlights the need to recognize adolescents as a unique population within the discipline of Pediatrics. He aims to empower and equip primary care providers with the knowledge neces-

sary to deliver quality, safe, and effective care to a very vulnerable patient population.

As guest editors for this issue, we expect that practicing pediatric clinicians will be able to implement the information gained from these articles in everyday practice. The advancement and evolution of scientific knowledge during recent years has led to more precise and effective care, and provid-

ers in all pediatric disciplines can benefit from these updates. As we read, learn, and apply this information, our patients will better avoid illnesses and recover more fully from infections, leading to stronger and healthier future generations.

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About the Guest Editors

Julia Rosebush, DO, FAAP, is an Assistant Professor in the Department of Pediatrics, Section of Infectious Diseases, and currently serves as the Medical Director of Care2Prevent (C2P), the University of Chicago's Pediatric and Adolescent HIV Program. C2P is the largest provider of pediatric HIV care on the South Side of Chicago and has steadily expanded to provide comprehensive clinical care, supportive services, and prevention efforts to South Chicago's most vulnerable youth and is steadily working to increase network recruitment for HIV/sexually transmitted infections testing in addition to the uptake of HIV PrEP (pre-exposure prophylaxis) for HIV-1 prevention. Dr. Rosebush serves as site principal investigator for several studies within the PHACS (Pediatric HIV/AIDS Cohort Studies) and IMPAACT (International Maternal Pediatric Adolescent AIDS Clinical Trials) networks of the National Institutes of Health. Additionally, she serves as Program Director for the Pediatric Infectious Diseases training program with a particular interest in leadership development.

Dr. Rosebush completed her medical training at the Michigan State University College of Osteopathic Medicine and her pediatrics residency at Nationwide Children's Hospital at The Ohio State University. Subsequently, she worked with the Baylor International Pediatric AIDS Initiative in Botswana before returning to the United States to complete a fellowship in Infectious Diseases at Emory University.

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Dr. Fischer's research has centered on congenital malaria, nutritional deficiencies (vitamin D, calcium, and thiamine), pediatric travel medicine, and adolescent chronic fatigue. He teaches around the world and is coeditor of the American Academy of Pediatrics' *Textbook of Global Child Health*.

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