10.5005/pid-3-1-iv

## **EDITORIAL**

Dear IAP IDians

Greetings from Pediatric Infectious Disease

We wish a very happy new year to all the members. Hope the year 2021 finds you in good health and spirits. We are happy to present January to March 2021 issue of our journal: *Pediatric Infectious Disease*. We are happy to share that the Journal is now indexed with Index Copernicus, DRJI, I2OR, J-Gate. We are ever grateful to all the authors, reviewers and the esteemed editorial board members. The present issue has many interesting articles especially on fungal infections.

Fungal infections in pediatric practice are common and yet often not discussed. Superficial fungal infections are easy to treat provided a prompt diagnosis is made and prolonged topical antifungals are used, occasionally requiring oral antifungals. Systemic fungal infections are assuming great importance because of rampant antibiotic use, increasing intensive care centers and a big subsection of survivors in oncology, primary and acquired immunodeficient states. The key to a successful management rests on a high index of suspicion in the vulnerable population, laboratory evidence and selecting the appropriate antifungal drug based on the local epidemiology. Invasive fungal infections are on the other hand difficult to diagnose, life threatening, have emerging antimicrobial resistance and need urgent intervention warranting a high index of suspicion. These aspects have been discussed in the review article–Fungal Infections in Children: A Simplified Approach.

Candidemia has emerged as one of the life-threatening causes of invasive infections in both adults and children worldwide. A 10-year retrospective study of children with candidemia diagnosed in a tertiary care center has been presented in the research article. Demographics, comorbidities, *Candida* species distribution, antifungal susceptibility, and outcomes are analyzed. A shift in *Candida* spp. with an increasing isolation of *C. pelliculosa* has been observed. The occurrence of azole resistance is a matter of concern. This type of data analysis is needed to track trends of serious infection and to develop guidelines for infection control strategies and antimicrobial stewardship programs.

Gastrointestinal Basidiobolomycosis: An Emerging Fungal Infection of the Gastrointestinal Tract, the Royal Hospital (Sultanate of Oman) Experience is an account of epidemiology, clinical characteristics, histopathology findings, management, ancillary techniques which are important for diagnosis, management and outcome of an uncommon manifestation caused by the Basidiobolus ranarum. Gastrointestinal Basidiobolomycosis (GIB) has clinical resemblance with inflammatory and neoplastic bowel disease and diagnosis requires a high index of suspicion.

Early diagnosis and adequate management are important to reduce the complications associated with dengue. Diagnosis of dengue fever is challenging in the initial stage of illness. The research article on dengue proposes a predictive model built on multivariate logistic regression based on clinical features and laboratory parameters at presentation to differentiate dengue fever (DF) from other acute febrile illnesses (AFI). Validation of this model in a larger population and different regions should be attempted.

Pneumonia in children has remained the leading cause of morbidity and mortality in children. Timely diagnosis and prompt treatment can avert many deaths; however, diagnosis of pneumonia in children still remains a challenge. Chest radiography has been widely used worldwide to diagnose pneumonia in children. However, in recent times, lung ultrasound is emerging as a useful tool to diagnose pneumonia in children. The ease of performing lung ultrasound, bedside availability, no exposure to ionizing radiation, allowance of real-time monitoring of patients make lung ultrasound an attractive tool for the intensivists. In this article, authors have elaborated the ultrasound equipment, technique, normal artifacts and various sonographic patterns of pneumonia in children. This article also summarizes the current evidence of use of lung ultrasound in the diagnosis of pediatric pneumonia and the strengths and limitations of this technique.

In the Antimicrobial section, an article: Use of Antifungals Other Than Amphotericin B for Invasive Fungal Infections in Neonates and Children, has been presented. The need for newer antifungals and the issues regarding the pharmacologic characteristics of antifungals in neonates and children were discussed in the article on amphotericin B in the last issue. Antifungal therapy for neonates, children and adolescents, especially in those primary or secondary immunodeficiencies with invasive fungal infections, is possible today due to the advent of newer antifungals. Studies of antifungals in the pediatric age group are limited to those for cutaneous fungal infections. Though there are a few studies on the pharmacokinetics and safety, these drugs are used off-label and most dosage recommendations are extrapolated from adult data. A review of the use of antifungals other than amphotericin B for treatment of invasive fungal infections in Pediatrics is the focus of this article.

Happy reading!

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