

Fungal Profile and Antifungal Susceptibility Patterns among Symptomatic Pediatrics Patients Attending Aboozar Children's Hospital, Ahvaz, Iran

Authors : Nasrin Amirrajab, Yasaman Razavi Ghahfarokhi, Zahra Tootak, Maryam Hadian, Fatemeh Abooali Shamshiri

Abstract : Urinary tract infections (UTIs) have been reported in children with nephrotic syndrome. However, the only causes for the infection reported to date are bacteria, but not many prior reported occurrences of fungi or yeast as causative organisms. Hence, the present study aimed to describe the epidemiology of urinary tract fungal infections in a tertiary care pediatric. A single-center cross-sectional study was conducted at the nephrology ward of Aboozar Pediatric Hospital between March 21, 2021, and April 28, 2022. Urine was collected aseptically from children, inoculated onto culture media, and incubated at 37 °C for 18–48 hours. Yeast was identified following standard procedures. Antifungal susceptibility testing was determined by the disk diffusion method according to the CLSI guideline. Descriptive statistics and logistical regressions were used to estimate the crude ratio with a 95% confidence interval. P-value < 0.05 was considered significant. Among 68 individuals referred to the mycology lab, the result of direct examination and culture of all patients approved for *C.albicans*. Of these, 38 individuals (55.8%) were male, and 30 (44.2%) were female. The patients' age ranges were between one month and an 18-year-old. In the study of infection intensity, the patients were classified into three levels such as few (73.5%), moderate (20.6%), and many (5.9%). In the present study, all the patients were sensitive to Posaconazole. Also, the eagle effect was found in Amphotericin B, Voriconazole, and Fluconazole with frequencies of 91.7%, 91.7%, and 83%, respectively. In addition, just 8.3% of isolates were resistant to Itraconazole. It has not shown resistance in other mentioned medicine. The patients showed an intermediate response to Itraconazole (91.7%), Fluconazole (17%), Voriconazole (8.3%), and Amphotericin B (8.3%). There is a high prevalence of yeast infections in children with suspected UTIs. Also, boys are more likely to get yeast infections, and the severity of the infection is higher than girls. The present study demonstrated the importance of diagnosing and selecting the appropriate drug for urinary tract fungal infections in hospitalized children.

Keywords : urinary tract infections, children, fungal infections, yeast, antifungal susceptibility

Conference Title : ICPFM 2022 : International Conference on Pathogenic Fungi and Mycology

Conference Location : Istanbul, Türkiye

Conference Dates : December 20-21, 2022