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Abstract (poster session)

Active surveillance of candidaemia in children from Latin America: a key requirement for improving disease outcome

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Objectives: Appropriate surveillance is a necessary step for a better management strategy and for improving patient outcome. Our aim was to describe epidemiologic and clinical features of candidemia in paediatric patients in Latin America (LA). Method: Prospective, multicentre surveillance study of candidemia in paediatric population from 23 hospitals of 8 countries in LA between November 2008 and October 2010. Results: Three hundred and two cases of candidemia were reported with a mean incidence of 0.81/1,000 admissions. Eighty nine (29%) were neonates. Prematurity and ICU admission were the main risk factors in neonates and malignancy and neutropenia in children. The main species isolated in neonates and children were C. albicans (44% and 35%), C. parapsilosis (27% and 26%), and C. tropicalis (15% and 14%), respectively. The most frequent antifungal therapy used in neonates and children was deoxycholate amphotericin-B (44% and 29%) and fluconazole (28% and 52%). Seventeen neonates (19%) and 20 children (9%) did not receive antifungal therapy. The 30-day survival was 62.5% in neonates and 75% in children (p=0.03). Among neonates, no variable predicted mortality, including the antifungal agent used as treatment, receipt of appropriate therapy and early (within 48 h of treatment initiation) catheter removal. Among non-neonates, multivariate predictors of poor outcome were renal disease (odds ratio [OR] 3.704, 95% confidence interval [95% CI] 1.597 – 8.547, p=0.002), receipt of corticosteroids (OR 2.123, 95% CI 1.051 – 4.292, p=0.04) and candidemia due to C. tropicalis (OR 2.463, 95% CI 1.029 – 5.882, p=0.04). Conclusions: To our knowledge, this is the first prospective, multicentre surveillance study of candidemia in children in LA. This epidemiologic information suggests an opportunity to improve preventive, diagnostic and therapeutic strategies in the region.