Enteric Fever in a Tertiary Paediatric Hospital: A Retrospective Six-Year Review
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Abstract

Introduction: Enteric fever is a multisystemic infection which largely affects children. This study aimed to analyse the epidemiology, clinical presentation, treatment and outcome of paediatric enteric fever in Singapore. Materials and Methods: A retrospective review of children diagnosed with enteric fever in a tertiary paediatric hospital in Singapore was conducted from January 2006 to January 2012. Patients with positive blood cultures for Salmonella typhi or paratyphi were identified from the microbiology laboratory information system. Data was extracted from their case records. Results: Of 50 enteric fever cases, 86% were due to Salmonella typhi, with 16.3% being multidrug resistant (MDR) strains. Sixty-two percent of S. typhi isolates were of decreased ciprofloxacin susceptibility (DCS). Five cases were both MDR and DCS. The remaining 14% were Salmonella paratyphi A. There were only 3 indigenous cases. Ninety-four percent had travelled to typhoid-endemic countries, 70.2% to the Indian subcontinent and the rest to Indonesia and Malaysia. All patients infected with MDR strains had travelled to the Indian subcontinent. Anaemia was a significant finding in children with typhoid, as compared to paratyphoid fever (P = 0.04). Although all children were previously well, 14% suffered severe complications including shock, pericardial effusion and enterocolitis. None had typhoid vaccination prior to their travel to developing countries. Conclusion: Enteric fever is largely an imported disease in Singapore and has contributed to significant morbidity in children. The use of typhoid vaccine, as well as education on food and water hygiene to children travelling to developing countries, needs to be emphasised.

Key words: Children, Fever, Paratyphoid, Typhoid

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