

ANTIMICROBIAL RESISTANCE PATTERN OF SHIGELLA SPECIES ISOLATED IN CHILDREN WITH SHIGELLOSIS

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Background and aims: Shigellosis is a common infectious disease in children. Inappropriate treatment with antimicrobial agents may result in severe complications and death. Identification of resistance pattern of shigella microorganism in each country is necessary. The aim of this study was to evaluate the sensitivity and resistance pattern of shigella in children with shigellosis.

Methods: In this cross sectional study, 103 children with definitely diagnosis of shigellosis were evaluated. This study was conducted in Qods children hospital affiliated to Qazvin University of Medical Sciences (Iran) in 2009-2010. Demographic, clinical and laboratory findings of patients were recorded. Data were analyzed by statistical methods.

Results: Mean age of patients was $54/5 \pm 28/9$ months (ranges: 20 days to 140 months). 49/5% were male and remainder females. Most of patients (68%) were under 5 years. Most of children (67%) were urban. Shigellosis was common during summer (50/5%). The most common clinical findings were fever (97/1%) and diarrhea (81.6%). The isolated organisms were *Shigella sonnei* (77/7%), *flexneri* (11.6%), *dysenteriae* (5.8%) and *boydii* (4.9%). All of species were sensitive to Aminoglycoside, Cephalexin and Ciprofloxacin. Resistance to trimethoprim- sulfamethoxazole, Ampicillin, nalidixic acid and ceftriaxone were 85/1%, 45.8%, 63.8% and 20%, respectively. There was not significant differences between *Shigella* species and seizure, bacteremia and bloody diarrhea. The mean of hospitalization was 4.02 ± 2.11 days.

Conclusions: The most of shigella species were resistant to Trimetoprim- sulfamethoxazole, Ampicillin and nalidixic acid.