

Original Paper

Pattern of serotyping and antibiotic resistance of Salmonella in children with diarrhea

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Abstract

Background and Objective: Gastroenteritis due to Salmonella is common in human and considered as a global dilemma of public health. This study was done to determine the Pattern of serotyping and antibiotic resistance of Salmonella in children with diarrhea in Iran.

Methods: In this laboratory study, 306 stool samples were collected from children with diarrhea in public health centers in Robat-karim, Tehran province, Iran. The specimens were enriched in Selenite F medium and then cultured on Hekton agar. The identification of Salmonella was carried out by conventional method and antimicrobial susceptibility testing was performed according to CLSI procedures.

Results: Out of 306 stool samples, 7.2 % were identified as Salmonella species, as follow: 7 Salmonella typhi, 6 Salmonella paratyphi B, 3 Salmonella paratyphi C, 2 Salmonella paratyphi A and 4 samples were not identifiable. There was a significant relation between presence of WBC in fecal and salmonellosis ($P < 0.05$). In drug sensitivity trends, 92.3% of Salmonella species were sensitive to chloramphenicol, ceftizoxime, Nalidixic acid and Amikacin.

Conclusion: This study showed that Salmonella was the cause of children diarrhea in 7.2% in this region.

Keywords: Salmonella, Diarrhea, Antibiotic resistance

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