Antibiotic Resistant Pattern in Salmonella spp. Isolated from Clinical Samples in Tehran

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ABSTRACT

Back ground and objective: In recent years, antimicrobial drug resistance among Salmonella species has been increasing. According to the importance of antimicrobial resistance among Salmonella spp. the aim of this study was to determine the antibiotic resistance pattern of Salmonella spp.

Materials and methods: isolated from hospitals in Tehran.41 Salmonella spp. strains isolated from different clinical specimens at different hospitals of Tehran during 2009-2010. These strains were identified by standard biochemical tests. Antibiotic susceptibilities were determined by disk-diffusion method according to CLSI guidelines.

Results: Among 41 Salmonella strains isolated in this study , 17/1% were resistant to Nalidixic acid, 17/1% were resistant to Co-trimocsazol , 14/6% were Chloramfnicol , 12% were resistant to Ampicilin ,4/9% were resistant to Ceftazidim , 4/9% were resistant to Cefotaxim ,4/9% were resistant to Aztronam , 2/4% were resistant to Gentamicin. Ciprofloxacin and Amikacin resistant strains were not observed in our investigation. All studied Salmonella isolates were sensitive to Ciprofloxacin. These findings suggested that Ciprofloxacin may still be useful against Salmonella infections. The most resistance of isolates was seen to Nalidixic acid, Cotrimocsazol, Cloramfenicol and Ampicillin.

Conclusion: The isolates showed low rate of resistance to studied cephalospotins and aminoglicosides. Considering of antimicrobial resistance rate, surveillance of antibiotics therapy is necessary.

Key words: salmonella, antibiotic resistance, Disk-diffusion