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Antimicrobial resistance of *Salmonella* isolates in Alanya, Turkey

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**Objective:** *Salmonella* is an important pathogen that causes food-borne infection in children and adults worldwide. The aim of this study is to evaluate the antimicrobial activity of antimicrobial agents against *Salmonella* isolates in Alanya, an important tourist center in Turkey.

**Methods:** The study was carried out at Baskent University Alanya Research and Teaching Hospital. *Salmonella* spp. were isolated from stool samples and stored at -80°C for antimicrobial susceptibility. Antimicrobial susceptibility was determined according to the Clinical and Laboratory Standards Institute criteria. The antibiotics tested against *Salmonella* spp. included ampicillin, trimethoprim-sulfamethoxazole, tetracycline, chloramphenicol, nalidixic acid, ciprofloxacin and ceftriaxone. Quality control was ensured by testing *Escherichia coli* ATCC 25922.

**Results:** A total of 63 consecutive *Salmonella* spp. were assessed for their antimicrobial susceptibility patterns, 21 of which were obtained from travelers. Serogroup D was the most common (65.1%), followed by B (22.2%), C (4.8%) and A (7.9%). The resistances against ampicillin, tetracycline, trimethoprim-sulfamethoxazole and chloramphenicol were found to be 15.9%, 15.9%, 14.3%, and 11.1% respectively. None of the strains was resistant to ciprofloxacin and ceftriaxone, while 14.3% were nalidixic acid-resistant. Antimicrobial resistance rates of *Salmonella* isolates obtained from travelers and local residents were not significantly different.

**Conclusions:** This study suggests that ciprofloxacin and ceftriaxone can be used as empirical therapies in patients who are suspected to have salmonellosis with predisposing factors to severe infection and a history of travel to Alanya, Turkey. However, the nalidixic acid resistance of *Salmonella* isolates may be a cause for concern.