

عنوان مقاله:

Prevalence assessment of Salmonella serovars in apparently healthy pet dogs in Tehran, Iran

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خلاصه مقاله:

Salmonellosis is considered to be a zoonotic disease, the transmission of which through oral-fecal contact is unavoidable because pet care has been popular recently. On the other hand, excessive use of human antibiotics to treat animals resulted in the emergence of antibiotic-resistant Salmonella serotypes. This study aimed to assess the prevalence of bacteria and antibiotic resistance to select the appropriate antibiotic for disease control. In this study, the presence of Salmonella serovars in the fecal samples of ۲۵۶ pet dogs was investigated by enrichment and selective culture. Moreover, the existence of virulence and antibiotic resistance genes, as well as phenotypic antimicrobial resistance, were assessed. Of the total of ۲۵۶ fecal samples, ۲۱ samples (۸.۲%) of pet dogs were positive for Salmonella, including S. Typhimurium, S. Enteritidis, S. Infantis, and S. Senftenberg. Based on our findings, all serovars carried virulence genes invA, invF, sitC, fimA and S. Typhimurium resistant to ampicillin (۱۰۰%), tetracycline (۵۰%), oxytetracycline (۷۵%), florfenicol (۵۰%) and lincospectin (۱۰۰%). While S. enteritidis, S. infantis, and S. senftenberg were sensitive to ampicillin, amikacin, gentamicin, and ciprofloxacin. S. Infantis was also sensitive to all antibiotics. In conclusion, our findings suggest that pet dogs are potential sources of Salmonella strains that carry resistance and virulence genes. Thus, healthy pet dogs could play an important role in human salmonellosis.

کلمات کلیدی:

antibiotic resistance gene, pet dog, Salmonella, virulence gene

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