



Oral Presentation

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## **Determination of *Salmonella* spp. prevalence and antibiotic resistance profiles in domestic animals**

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### **Abstract**

Besides being a foodborne zoonotic pathogen, *Salmonella* can be a potential source for humans due to close contact between pets and their owners. This study aimed to prevalence and antimicrobial resistance of *Salmonella* spp. in apparently healthy and diarrheic cats and dogs. In addition, macroscopic appearances of lactic acid bacteria(LAB) isolated from feces of both *Salmonella* positive and *Salmonella* negative dogs were investigated. As a result of the bacteriological examination of rectal swab samples taken from a total of 341 pets, 184 cats and 157 dogs, brought to private clinics, *Salmonella* spp. was positive in 9 (5.73%) healthy-looking dogs, while *Salmonella* spp. was not seen in cats (0.00%). As a result of macroscopic examination of LAB, there was no significant difference between *Salmonella*-positive dogs and negative ones. In addition, there was a relationship between the occurrence of *Salmonella* spp. in dogs and the consumption of raw meat and the living environment. When the antibiotic resistance profiles were examined in 9 isolates, resistance formation was observed against 6 of the 19 antibiotics tested according to their MIC values, while the resistance rates were respectively: CIP (21.05%), SXT, LVX, AM (10.52%), ETP, SXA (5, 26 %). And when 13 antibiotics were analyzed for 9 isolates using the disk diffusion method, resistance was observed against 6 of them and the resistance rates were found as NA (15.38%), TE, DO, C, FFC, S3 (7.69%). Multi Drug Resistance (MDR) was observed in 2 of 9 positive isolates and when a preliminary screen for Extended-Spectrum-B-Lactamase (ESBL) production was performed, ESBL was not detected for any isolate. As a result, dogs were seen as *Salmonella* spp.carriers, and when *Salmonella* carriers were examined in healthy dogs with diarrhea, *Salmonella* was isolated in healthy dogs. It has been determined that hygiene practices should be observed after contact with dog feces and that dogs should be fed well-cooked foods to reduce the risk of *Salmonella* spp.

**Keywords:** *Salmonella*, cat, dog, antimicrobial sensitivity, *Lactobacillus*

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