

Frequency of Isolation and Antimicrobial Susceptibility Pattern of *Staphylococcus intermedius* From Dogs and Cats

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Abstract

A six-week study was carried out to isolate *S. intermedius* and determine their antimicrobial susceptibility from dogs and cats. The bacteria was isolated and identified from the skin and oral cavity swabs from 30 pet dogs and cats presented to University Veterinary Hospital and 30 dogs and cats from animal shelter. 38.3% of *S.intermedius* was isolated from total of 120 samples. The highest frequency (34.8%) of isolates was found in pet dogs. This was followed by pet cats, animal shelter dogs and animal shelter cats. The antimicrobial susceptibility pattern was detected by disc diffusion method. A high percentage of resistance was observed in ampicillin, tetracycline, and sulpho-compound at 80.4, 71.7, and 65.2% respectively. The resistance towards methicillin and ceftriazone were similar at 54.4%. Most of the isolates were susceptible to ciprofloxacin with 19.6% resistance rate. Almost 70% of these isolates showed multiple-antimicrobial resistance. It is concluded that *S. intermedius* is present in dogs and cats, distributed on the skin surface and in the oral cavity. Their antimicrobial resistance rates are of public health concerns. This potential human pathogen should be given consideration in bite wound and other infected lesions.

Keywords: *S. intermedius*, dogs, cats, antimicrobial resistance, zoonosis