

TITLE: FREQUENCY OF MICROBIAL AGENTS ISOLATED FROM DOGS ATTENDED AT THE VETERINARY HOSPITAL OF THE FEDERAL UNIVERSITY OF CAMPINA GRANDE, FROM 2012 TO 2017

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ABSTRACT:

Dogs and cats are increasingly being incorporated into households, and their close contact with humans brings innumerable benefits, but also implies risks to public health, mainly represented by zoonoses, since these animals can harbor and transmit infectious agents that cause diseases with zoonotic potential. In this way, the microbiological diagnosis has its outstanding relevance, being considered of fundamental importance as an aid method for the clinical diagnosis, besides contributing to the orientation in the choice of the appropriate antibiotic therapy and consequent prevention of the occurrence of antimicrobial resistance. Thus, the objective of this study was to determine the frequency of microbial agents isolated from dogs attended at the Small Animal Medical Clinic of the University Veterinary Hospital (HVU) of the Federal University of Campina Grande (UFCG), Campus of Patos - PB, from March 2012 to December 2017. We analyzed 351 animals that had biological samples submitted to the microbiological diagnosis in the Laboratory of Microbiology (LM) of the HVU. In total, 219 (62.4%) samples were positive for any agent (bacterium or fungus). Regarding the type of biological material 77 (22%) were skin/hair scraping, 44 (12.5%) atrial swab, 22 (6.2%) ocular swab, 17 (4.8%) abscesses, 15 (0.8%) urine, 10 (2.8%) nasal swab, 10 (2.8%) vaginal swab, two (0.5%) cerebrospinal fluid, two 5%) cavity liquid, two (0.5%) feces and 16 (4.5%) other types of samples. Bacteria were the most commonly isolated agents (128 samples; 58.4%), being *Staphylococcus* spp. the most frequent (71 samples; 55.5%), followed by *Escherichia coli* (13 samples; 10.2%), *Klebsiella* spp. (13 samples, 10.2%), *Streptococcus* spp. (9 samples; 7%) and *Pseudomonas* spp. (5 samples; 3.9%). Related to fungi, the total number of isolates was 42 (19.2%), and the most frequently isolated were *Aspergillus* spp. (15 samples; 35.7%), *Trichophyton* spp. (8 samples; 19%) and *Epidermophyton floccosum* (6 samples; 14.3%). Thus, the occurrence of microbial agents in dogs attended at the HVU/UFCG is significant, and in this context, complementary tests are important for the correct identification of microorganisms contributing to the implementation of adequate and effective treatment, avoiding the indiscriminate use of antibiotics, which may contribute to antimicrobial resistance, with implications for public health.

Keywords: infection, dogs, antimicrobial resistance, one health.