

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

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**ABSTRACT:**

The domestic cat is considered one of the main pets and of greater prevalence in the Brazilian households, corresponding to 17.7%. Because these animals are susceptible to various fungal and bacterial infections, and some of them have zoonotic potential, the close cat/human relationship may facilitate the transmission of pathogenic microorganisms. In this context, the microbiological diagnosis of agents present in domestic cat infections has its outstanding relevance, being considered of fundamental importance as an aid method for clinical diagnosis. In this way, the objective of this work was to conduct a survey of microbial agents isolated from domestic cats 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 189 animals that had biological samples submitted to the microbiological diagnosis in the Laboratory of Microbiology (LM) of the HVU. Of these, 125 (66.2%) animals had positive results for any etiological agent (bacteria or fungi). Most of the samples sent came from the tegumentary, urinary and respiratory systems, corresponding to 64 (33.8%) skin samples, 47 (24.8%) urine and 18 (9.5%) nasal swabs. The predominant agents in this study were bacteria (86/125; 68.8%), being *Staphylococcus* spp. (33.7%), *Streptococcus* spp. (16.3%), *Escherichia coli* (12.8%), Gram negative rods (10.5%), *Klebsiella* spp. (9.3%), *Bacillus* spp. (4.6%) and *Pseudomonas* spp. (3.5%) the most prevalent agents. In relation to fungi, 16 samples (12.8%) were positive, with predominance of *Aspergillus* spp. (31.3%), *Microsporum* spp. (18.7%), *Trichophyton* spp. (12.5%) and *Cryptococcus* spp. (6.3%). Mixed infections (bacteria and fungi) were observed in 23 samples (18.4%). Thus, the occurrence of microbial agents in cats 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, cats, antimicrobial resistance, public health.