TITLE: ETIOLOGY AND PROFILE OF ANTIMICROBIAL SENSITIVITY IN CANINE AND FELINE OTITE

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ABSTRACT

Otitis is a common disease in dogs and cats, as well as being one of the main reasons for referral to the veterinarian and causing considerable discomfort to the animals. It has a multifactorial etiology, such as the presence of several microorganisms, which leads to continuous antimicrobial treatments, thus contributing to the emergence of resistant strains. Therefore, there is a need for studies to verify the antimicrobial susceptibility profile of these microorganisms. This study aimed to collect retrospective data on the etiology and other aspects of otological conditions (bacterial and fungal) which were characterized in otitis and occurred in 43 cases, affecting dogs and cats treated at the University Veterinary Hospital of the Universidade Federal do Vale do São Francisco - UNIVASF, in the period from February 2015 to March 2017. The cases of otitis were analyzed from the medical record of the Veterinary Hospital and their samples arrived to the Laboratory of Microbiology and Animal Immunology of UNIVASF conditioned in Swab Stuart or sterile collector. The etiological description of the 43 cases was made, being 2 caused by bacteria, 8 by fungi and 33 by the association of both. The etiological identification was carried out from the staining of Gram, catalase and oxidase, followed by antimicrobial sensitivity test (gentamicin, ciprofloxacin, sulfazotrim, cephalexin, oxacillin and chloramphenicol) and culture isolation of bacterial and fungal samples, respectively. As a result, there was a high percentage of susceptibility of the isolated bacteria to the main antibiotics used in the treatment, mainly Gram-positive bacteria, which showed a sensitivity over 62% to the antibiotics tested. There was a higher frequency of Staphylococcus spp. (41.7%), followed by filamentous fungi with no pathological significance (34.1%), Gram-negative bacilli (16.2%) and other microorganisms (8.0%). In these isolated bacteria, gentamicin and ciprofloxacin showed the highest sensitivity indexes, while sulfazotrim presented the highest resistance indexes. This work emphasizes the importance of bacterial and fungal identification for choosing the appropriate antimicrobial agent in the treatment of diseases treated in the veterinary medicine area.

Keywords: *Staphylococcus*, fungi, disc diffusion.

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