

TITLE: IDENTIFICATION AND CHARACTERIZATION OF BACTERIA IN VETERINARY HOSPITAL ENVIRONMENT

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SUMMARY

The hospital infection is a common and serious problem of hospitals, and may contribute to increased morbidity, mortality, and cost of treatment. Proper cleaning of the surfaces and good habits of health professionals are fundamental to the control of the spread of micro-organisms, including those presenting resistance to antibiotics. The collection of the samples was carried out in the Veterinary Hospital Universitário-Univasf before and after disinfection activities, with the aid of sterile swab and transferred to the Stuart transport medium modified. 22 samples were collected from four environments, service room, operating room, balance of dogs and cats. They were the Brain Heart Infusion broth and incubated at 37° C for 24 hours, then an aliquot was seeded on blood agar and MacConkey. To identify the Gram stain and the biochemical tests. The antibiotics Ampicillin (10 µg), Azithromycin (15 µg), Ceftriaxone (30 µg) Ciprofloxacin (5 µg), Doxycycline (30 µg), Sulfazotrim (25 µg) and tobramycin (10 µg), were selected for the disk diffusion test. The calculation of the index of multidrug resistance to antimicrobials (IRMA). All surfaces were contaminated. The bacterium *Alcaligenes* spp. had the highest rate at 21.95%, followed by *Hafnia* spp. and *Acinetobacter* spp. (17%), *Pseudomonas* spp. (14.64%), *Staphylococcus coagulase* + (12.2%), *Staphylococcus aureus* (9.75%) and *Streptococcus* spp. (7.32%). Ampicillin had a resistance profile of 100%, Ceftriaxone (80%), Sulfazotrim (60%), Azithromycin (46.7%), tobramycin (33.33%), Doxycycline (13.33%) and Ciprofloxacin (6.7%). According to the results, 12 isolates showed antimicrobial multidrug resistance, with IRMA ranging from 0.14 to 0.71. For the cleaning of the surfaces is used Quaternary ammonia and alcohol 70%. For the lavabo of the surgical block, only the contact with Chlorhexidine to 2% in the hands of professionals and wash the floors of the environments is washed with alkalizing chemical. It is concluded that there is no efficiency in the use of the chemicals used to clean the environments, so there should be a concern about this fact, taking into account the possibility of having a cross contamination of patients and even Professionals who are inserted in this environment.

KEYWORDS: Asepsis; Microorganisms. Microbial resistance; Nosocomial Infection.

This study was financed in part by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior – Brasil (CAPES) – Finance Code 001