

TITLE: PHENOTYPICAL CHARACTERIZATION OF ISOLATED BACTERIA OF UTERINE CONTENT OF BITCHES DIAGNOSED WITH PYOMETRA

AUTHORS: QUEIROZ P.H.P; RIBEIRO W.M.; ROCHA R.A.; BARBOSA, M.S.; CARNEIRO, L.C.; BRAGA C.A.S.B.

INSTITUTION: INSTITUTO DE PATOLOGIA TROPICAL E SAÚDE PÚBLICA- UNIVERSIDADE FEDERAL DE GOIÁS - GOIÂNIA CITY, GOIÁS STATE, BRAZIL (235 STREET, NO NUMBER - SETOR UNIVERSITÁRIO NEIGHBORHOOD, ZIPCODE 74605-450.

ABSTRACT:

Pyometra is a condition in which the accumulation of purulent secretion occurs inside the uterus of bitches, and the cause may be hormonal, infectious or inflammatory. The objective of this study was to identify bacteria from 16 bitches submitted to ovariohysterectomy after being diagnosed with pyometra to eradicate the antibiogram from the samples. After the surgical procedure, two milliliters of uterine contents were collected by aspiration puncture with sterilized syringe, which were transferred to tubes containing Brain and Heart Infusion Broth and immediately sent to the Laboratory of Phenotyping and Molecular Biology (LAFEBIM) of the Institute of Tropical Pathology and Health of Federal University of Goiás, where they were processed. The sample was peeled into Petri dishes containing MacConkey agar, Manitol salty agar and Columbia agar supplemented with 5% horse defibrinated blood. The plates were incubated in a bacteriological oven at 37°C for 48h in aerobiose. The antibiotic test was performed with the antibiotics indicated in the Clinical and Laboratory Standards Institute. Of the 16 pyometra evaluated, 50% had as *Escherichia coli*, two *Klebsiella spp.*, 31.25% *Staphylococcus spp*, 12.5% mixed infection of *Staphylococcus spp.* and *Streptococcus spp.* and 6.25% mixed infection with two enterobacteria (*Escherichia coli* and *Citrobacter spp.*). In 75% of the cases the presence of resistance to the tested antibiotics was detected, being five bacteria resistant to tetracycline, five to ampicillin, four to tobramycin, three to erythromycin, three to amoxicillin and clavulanic acid, three to cefazolin, three to ciprofloxacin, three to sulfamethoxazole and trimethoprim , three to gentamicin, two to penicillin, one to ceftazidime, one to imipenem, one to ceftiofur and one to ceftriaxone. Among the enterobacteria, it was possible to detect a *Klebsiella spp.* producer and betalactamase type AmpC. The amplitude and resistance detected in the present study demonstrates the necessity of conducting a phenotypic microbiological study in cases of pyometra before administering an antibiotic therapy, so that there is no failure in the prescribed treatment.

Keywords: Pyometra, bacterial identification, antibiogram, resistance.

Agency: Researchers' own resources.