

**ANTIMICROBIAL RESISTANCE PROFILE FROM CASES OF PYOMETRA  
ADMITTED TO THE HV-UEM**

*(PERFIL DE RESISTÊNCIA ANTIMICROBIANA EM CASOS DE PIOMETRA ATENDIDOS  
NO HV-UEM)*

**L. G. CORONEL<sup>1\*</sup>, R. A. P. SFACIOTTE<sup>2</sup>, J. T. BORDIN<sup>3</sup>, V. K. C. VIGNOTO<sup>4</sup>, S. R.  
WOSIACKI<sup>5</sup>**

The opportunistic pathogens which pass through the cervix and reach the uterus can lead to the development of pyometra (Rocha et al., 2004). The main micro-organisms associated with genital infections of animals are: *Escherichia coli*, *Proteus* sp., *Staphylococcus* spp. and *Streptococcus* sp. (JOHNSTON et al., 2001). The treatment for pyometra may be surgical or clinical, and in both cases broad-spectrum antibiotics are used. Among the antibiotics with the highest sensitivity are norfloxacin (94%), polymyxin B (82.8%) sulfazotrim (76.8%), enrofloxacin (75.5%) and chloramphenicol (75.5%) (Coggan et al., 2008). The aim of the study was to determine the antimicrobial resistance profile in cases of pyometra. The samples were obtained from clinical cases seen at the Veterinary Hospital of the Maringá State University. A total of 12 samples were used, as follows: *Staphylococcus* spp. (4), *Streptococcus* spp. (2), *Providencia* spp. (2), *E. coli* (1), *Entorobacter* spp., (1) *Serratia* spp. (1) and *Proteus* spp. (1). The profile of antibiotic resistance was performed according to the standards recommended by the Clinical and Laboratory Standards Veterinary Institute (CLSI, 2008) for disk diffusion according to the bacterial genus. Regarding sensitivity results to enrofloxacin and norfloxacin, the data confirm the results found by Coggan et al. (2008), which were 92% and 84%, respectively. However, the sensitivity to chloramphenicol and sulfazotrim are below the levels determined by the same authors (58% and 67%, respectively). Of the four strains of *Staphylococcus* assessed, three (75%) were susceptible to oxacillin, and one (25%) resistant, determining resistance to other beta-lactam antimicrobials. The antibiotics of the aminoglycoside class, amikacin, gentamicin and streptomycin also showed high sensitivity (83%, 83% and 75%, respectively). All strains were susceptible to carbapenems (imipenem and meropenem). These results show the importance of controlling antimicrobial agents in veterinary medicine, as resistance indices are increasing.

<sup>1</sup>Acadêmico de Medicina Veterinária da Universidade Estadual de Maringá, e-mail: [lincolnrcoronel@gmail.com](mailto:lincolnrcoronel@gmail.com) .

<sup>2</sup>Mestrando em Ciência Animal da Universidade Federal do Paraná setor Palotina.

<sup>3</sup>Médica Veterinária Residente de Microbiologia e Doenças Infecciosas Animal da Universidade Estadual de Maringá.

<sup>4</sup>Técnica e Auxiliar do Laboratório de Microbiologia Animal da Universidade Estadual de Maringá.

<sup>5</sup>Professora Doutora da Universidade Estadual de Maringá.