

# ANTIBIOTIC RESISTANCE OF ORGANISMS ISOLATED FROM CLINICAL CASES AT THE MICROBIOLOGICAL DIAGNOSTIC LABORATORY: A PRELIMINARY STUDY

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Antibiotics are used as therapeutic as well as prophylactic measures in livestock industries and pet animal clinics. Use of antibiotics without any restrictions or rationale has led to serious problems such as drug resistance and hypersensitivity in the human population.

The antibiotic sensitivity pattern of causative organisms isolated from specimens submitted to the microbiological diagnostic laboratory at the Faculty of Veterinary Medicine and Animal Science during 12.06.2001 to 12.10.2001 was analyzed with a view to detect any drug resistance. The bacterial isolates obtained from a total of 37 cases showed resistance to a number of antibiotics tested. The organisms isolated and included in the study were *E.coli*, *Streptococcus* spp, *Klebsiella* spp., *Pseudomonas* spp., *Aeromonas* spp., *Jonesia* spp, *Acinetobacter* spp, *Staphylococcus* spp and coliforms. These isolates originated from 24 canine, 8 bovine, 2 feline and 3 wild animal samples. Seventy three percent of the organisms studied showed resistance to trimethoprim + sulphadiazine combination. A few organisms (10.8 %) showed resistance to gentamycin. Only one organism (a *Staphylococcus* spp.) showed resistance to amoxicillin + clavulanic acid combination. The other antibiotics for which the organisms showed resistance were erythromycin (37.8 %), tetracycline (29.7 %), ampicillin (24.3 %), methicillin (21.6 %), penicillin (18.9 %), enrofloxacin (13.5 %), mupirocin (2.7 %), cephadrine (2.7 %), streptomycin (2.7 %), dicloxacillin (2.7 %), and norfloxacin (2.7 %). The results of the study so far show the potential danger of continuous use and abuse of antibiotics.