Antibiotic susceptibility profiles (Disk diffusion method) of the most frequently isolated bacteria in canine chronic bacterial otitis externa

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Abstract :

The aim of this study was to describe the resistance profiles of the main isolated bacteria in canine cases of Chronic bacterial Otitis Externa (COE) (clinical evolution for more than two weeks, bacteria on cytology).

Data from 104 ears (64 dogs) with COE with bacterial identification and antibiogram (disk diffusion method) were included. When multiple, only the two main strains were considered and defined as sensitive: S (no resistance) ; resistant: R (acquired resistance against 1 or 2 families of antibiotics) ; multiresistant: MR (acquired resistance against ≥ 3 families of antibiotics).

The most frequent isolates were *Staphylococcus pseudintermedius* (Spi, 60%), *Pseudomonas aeruginosa* (P.a, 30%), *Streptococcus sp* (Str., 25%), *Corynebacterium sp* (Cor., 22%) and *Proteus mirabilis* (Prot., 15%).

The global profiles for individual ears (highest resistance profile detected) showed a high prevalence of (multi)resistance : S 9%, R 33% and MR 58%.

The resistance rates varied when one single or at least two strains were isolated: respectively 32%, 0% (S), 14%, 40% (R) and 54%, 60% (MR).

Resistance profiles were: Spi: S 37%; R 45%; MR 18% (only one oxacillin resistant, so probably methicillin resistant = MRSP) ; P.a: MR 100% ; Str.: R 96% ; MR 4% ; Cor. : S 5%; R 68; MR 27% and Prot.: R 33%; MR 66%.

The acquired resistance was: gentamicin: 5% (Spi), 14% (P.a); marbofloxacin 3% (Spi), 17% (P.a), 18% (Cor), 7% (Prot) ; florfenicol 100% (P.a), 7% (Prot) ; polymyxin B 13% (P.a and Prot) and fusidic acid 5% (Cor).

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