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### Search for adhesins-encoding genes in *Staphylococcus spp.* isolated from small animals

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Despite its clinical importance, there is only very limited knowledge about the pathogenesis of staphylococcal infections in small animals, and the specific bacterial virulence factors involved in causing these diseases. Staphylococcal infection initiates from the adhesion of the microorganism to the tissue of the host. Adhesion is favoured by the presence of virulence factors known as adhesins, which are grouped in a family known as the microbial surface components recognising adhesive matrix molecules (MSCRAMM). After isolation and identification of microorganisms by culture plate methods, 118 *Staphylococcus* strains were identified; 111 (94.07%) from canine and 7 (5.93%) from feline origin. Among *Staphylococcus*, seven different species were isolated: 82 (69.49%) *Staphylococcus pseudointermedius*, 19 (16.10%) *Staphylococcus epidermidis*, 7 (5.93%) *Staphylococcus xylosus*, 4 (3.39%) *Staphylococcus chromogenes*, 3 (2.54%) *Staphylococcus spp.*, 2 (1.69%) *Staphylococcus aureus*, 1 (0.85%) *Staphylococcus schleiferi*. The search for MSCRAMM and biofilm-encoding genes in the strains of *Staphylococcus spp.* was performed using a polymerase chain reaction (PCR). Primers were used to detect the genes encoding for collagen-binding protein (cna), laminin-binding protein (eno), elastinbinding protein (ebpS), fibrinogen-binding protein (fib), fibronectin-binding protein A (fnbA) and fibronectin-binding protein B (fnbB) and biofilm formation-encoding genes (bap). All genes were detected except for ebpS and bap. The most frequently detected gene in both species was eno (89, 9%). Association of genes eno/fib/fnbA and eno/fnbB were also detected. Such information on the subject allows the development of more efficient strategies for treatment and control of *Staphylococcus* infection in small animals. Studies of the molecular aspects of *Staphylococcus* that cause infections in small animals should be increased in order to clarify the factors involved in the pathogenesis of the disease.

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