Persistence of Staphylococcal Infections Transmitted from Dams to Pups

*Staphylococcus pseudintermedius* is a commensal bacterium of dogs that lives on mucosal and skin surfaces and is considered an opportunistic pathogen. Puppies are colonized shortly after birth, often with the same clone the dam carries. This study investigated how frequently these clones persisted on offspring after they were separated from the dam. The mouth and perineum of 18 dams and 50 offspring were sampled. *S. pseudintermedius* presence was confirmed via PCR, and clones were confirmed via pulsed field gel electrophoresis. In 12 of 18 dog families, *S. pseudintermedius* was isolated from ≥1 body site from both the dam and ≥1 corresponding offspring. In the remaining 6 families, 3 dams were positive but respective offspring were negative or vice versa. In total, 19 isolates from 12 dams and 41 isolates from 27 offspring were analyzed; in 4 families the PFGE strains were the same or similar; the dam and offspring had been separated between 2 months and 4 years.

**Commentary**

Transmission of *S. pseudintermedius* from dam to offspring occurs, but the persistence of these strains has not been reported. This study succinctly demonstrated that these strains can persist on the offspring for significant time periods. Frequent antibiotic administration raises the risk for bacterial resistance. If a dog has a family history of resistant staphylococcal infection, performing a culture early is important, as the dam and its relatives may be carriers of resistant organisms. This bacterial transmission can occur even if the dog has not received antibiotics itself. The fact that *Staphylococcus* spp can persist after being transmitted from one dog to another underscores the importance of rational and prudent antibiotic use.—*William Oldenhoff, DVM*

**Source**


CKD Screening: Important at Any Age

This retrospective study sought to determine the prevalence of chronic kidney disease (CKD) in 2 cohorts of cats: those randomly selected (RS) from 4 evenly distributed age groups in a clinical setting (6 months–20 years) and those from degenerative joint disease (DJD) studies. It also reported the concurrence of CKD and DJD in the DJD group and assigned CKD stages using guidelines from the International Renal Interest Society (IRIS). Cats in the RS and DJD groups were placed into 3 categories based on results from blood work, urinalysis, and radiographic findings: CKD positive, small kidneys, and CKD negative.

The prevalence of CKD in the RS and DJD groups was 50% and 68.8%, respectively. In both groups, CKD prevalence of IRIS stages 1 and 2 was similar in the younger age groups with increased prevalence in cats ≥15 years of age. Most CKD-positive cats in the DJD study were IRIS stage 2. The significant concurrence of CKD and DJD in cats of all ages suggested an increased need for CKD screening before DJD treatments.

**Commentary**

This study suggested that CKD and DJD are possibly more common in all ages of cats than previously thought. Although the authors found, on average, that ~50% of cats from a randomly selected population had CKD and ~68% of cats with DJD also had CKD, the descriptive statistical analysis is insufficient to determine if CKD and DJD are somehow related. Regardless of the lack of robust statistical analysis, it is clear that cats of all ages should be screened for CKD to identify at-risk cats, particularly if NSAID therapy is considered. Interestingly, the cats used to define the randomly selected group were also included in 2 previous DJD studies (noted in the study’s sources), and many cats were found to have evidence of DJD in those studies.—*Glenn A. Olah, DVM, PhD, DABVP (Feline)*

**Source**


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