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## THE CURRENT LITERATURE IN BRIEF

### Beating Persistent UTIs

Urinary tract infections (UTIs) are uncommon in healthy animals despite proximal potential for fecal contamination. The urinary tract has a great capacity to clear infection through normal micturition, mucosal defense barriers, antibacterial properties of urine, anatomical structure, and immune competence. In this retrospective study (1989–1999), medical records of 100 dogs with persistent UTIs or reinfections were reviewed. Signalment, predisposing disorders (when identified), urinalysis, culture, and treatment were extracted from records, and treatment strategies evaluated. Median age of the dogs was 7 years. Dogs younger than 3 years and spayed females were at increased risk, and dogs older than 10 years were at decreased risk. More than half of the dogs were initially asymptomatic for UTI. The most commonly isolated organisms were *E. coli* and *Streptococcus* and *Enterococcus* spp. Multiple isolates were common, and 29.5% of the isolates were resistant to typically prescribed antibiotics.

Potentially predisposing disorders were identified in 71 cases. Dogs given standard antibiotic therapy without addressing predisposing disorders had poor control of UTIs, whereas dogs in which predisposing disorders were corrected (25 of 71 dogs) or those treated with a low-dose, long-term antibiotic regimen subjectively had better control of UTIs. A wide range of potentially contributing disorders was identified in these dogs. Although admittedly a small study, emerging recommended treatment strategies include correcting or appropriately managing predisposing disorders, or if that is not possible, treating persistent UTIs with a low-dose, long-term antibiotic regimen rather than short-term antibiotic therapy.

**COMMENTARY:** Recurrent UTI poses a real problem for all practitioners, particularly with the development of antimicrobial resistance. In this study, the infection-free interval was increased when predisposing causes of infection were identified and eliminated. This suggests that affected patients would benefit from a workup to identify such risk factors as abnormal micturition (detrusor dyssynergia), foci of infection (prostate abscesses), abnormal anatomy (vestibulovaginal stenosis), abnormal mucosal defense barrier (transitional cell carcinoma), altered urine composition (diabetes mellitus), and immune compromise (hyperadrenocorticism). —*David F. Senior, BVSc, Diplomate ACVIM & ECVIM*

*Persistent urinary tract infections and reinfections in 100 dogs. Seguin MA, Vaden SL, Altier C, Stone E, Levine JF. J VET INTERN MED 17:622-631, 2003.*