Risks for Resistant *E coli*

*Escherichia coli* is the most common bacterial species identified in feline urinary tract infections (UTIs). Cats >10 years of age or those with chronic disease (eg, renal failure, hyperthyroidism, diabetes mellitus) are more prone to UTIs.

This prospective study examined multiple drug–resistant (MDR) *E coli* UTI in cats. Ten cats with MDR *E Coli* UTI and 42 cats with non-MDR *E coli* UTI were included. The effects of age, sex, concurrent diseases, and number of hospitalization days on MDR *E coli* UTI risk were assessed. The number of antibiotic groups administered within the prior 3 months was significantly associated with elevated MDR *E coli* UTI risk. Number of hospitalization days was nonsignificantly associated with MDR *E coli* UTI. It was concluded that urine culture and sensitivity testing is warranted while treating UTIs if antibiotics have been administered within the past 3 months.

**Commentary**
This study’s authors successfully confirmed their hypothesis that prior administration of antibiotics was associated with UTIs with MDR bacteria. The study is clinically relevant, as it reinforces the importance of obtaining a sample for urinary culture with antibiotic sensitivity testing in all cats, but especially cats that have been prescribed antibiotics within 3 months of presentation. Resistance to the most common antibiotics is becoming an increasingly problematic issue, further underscoring the need for appropriate antibiotic use based on documented urine culture results.—Dara Zerrenner, MS, VMD, DACVIM

**Source**

To Evaluate Laryngeal Function, Consider Propofol

Signs of laryngeal paralysis include mild exercise intolerance, stridor, a hoarse bark, and respiratory distress. Affected dogs can have a range of signs, depending on the degree of laryngeal paralysis; accurate evaluation of arytenoid function is necessary to determine the degree, as severe cases can be life threatening.

This study of 48 healthy dogs examined propofol and propofol–ketamine as anesthetic agents for direct oral laryngoscopy. The authors found that laryngeal exposure did not differ significantly between the 2 anesthetic groups and was moderate to excellent in all dogs. Doxapram was used to stimulate respiration in apneic patients, and its administration significantly increased the ability to determine normal laryngeal function. Ketamine–propofol did not allow a decrease in the propofol dose, and its use increased respiratory depression. Doxapram, meanwhile, is recommended in patients that develop apnea or have shallow respirations to improve the accuracy of laryngeal functional interpretation when arytenoid abduction is not observed under propofol anesthesia.

**Commentary**
Diagnosis of laryngeal paralysis requires a light plane of anesthesia to allow for examination and manipulation of the canine larynx. In the past, thiopental provided adequate anesthesia with little to no effects on laryngeal physiology, reducing the incidence of laryngeal paralytic misdiagnoses. Because several anesthetic drugs (including thiopental) are no longer available, practitioners must use alternative induction agents to assess laryngeal function. In this study, propofol and a popular combination of propofol with ketamine (+ doxapram) were investigated for anesthesia during evaluation of laryngeal function in healthy dogs. The results of this study provide valuable information for practitioners facing challenging decisions at a time when anesthetic drug options are becoming increasingly limited.—Andrew Claude, DVM, DACVAA

**Source**