

## **Kajian Antibiotik Berdasarkan Sifat Kepekaan Bakteri terhadap Antibiotik pada Kasus *Feline Urinary Tract Infection* di Klinik Hewan Wilayah Kabupaten Sleman Provinsi Daerah Istimewa Yogyakarta**

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### **INTISARI**

*Urinary tract infection* (UTI) merupakan gangguan pada sistem urinaria khususnya vesica urinaria dan urethra yang dapat disebabkan oleh infeksi bakteri. Metode isolasi dan identifikasi bakteri dari sampel urin (*gold standar diagnosis*) jarang dilakukan karena memerlukan waktu yang panjang. Penelitian ini bertujuan untuk mengetahui metode diagnosa tentatif yang efektif dilakukan dokter hewan di lapangan, mengetahui bakteri penyebab UTI serta antibiotik yang tepat dalam penanganan kasus UTI pada kucing khususnya di Kabupaten Sleman, Provinsi Daerah Istimewa Yogyakarta. Enam belas kucing diperiksa mulai dari anamnesis, pemeriksaan klinis dan laboratoris (pemeriksaan fisik, pemeriksaan *ultrasonografi* (USG), urinalisis, pemeriksaan hematologi, kultur bakteri). Kucing yang terdiagnosa UTI dilanjutkan dengan pengujian sensitivitas antibiotik. Keseluruhan data yang didapat dianalisis secara deskriptif. Hasil penelitian menunjukkan gejala klinis pada kucing penderita UTI didominasi oleh disuria, hematuria, stranguria, pollakiuria dan penurunan nafsu makan. Perubahan bentuk, penebalan dinding dan ditemukannya urolith dalam lumen ditemukan pada hasil pemeriksaan USG vesica urinaria kucing penderita UTI. Perubahan warna, kekeruhan, adanya kristal, protein, leukosit dan darah juga ditemukan pada urin kucing penderita UTI. Bakteri yang ditemukan diantaranya *Staphylococcus epidermidis*, *Staphylococcus aureus*, *Streptococcus uberis*, *Enterococcus faecalis*, *Bacillus sp*, *Escherichia coli*, *Pseudomonas aeruginosa*, *Klebsiella sp.*, *Proteus sp.* dan *Enterobacter sp.* dan didominasi sensitif terhadap antibiotik *gentamycin*, *amoxicillin* dan *meropenem*. Berdasarkan data yang diperoleh pada penelitian ini disimpulkan bahwa metode diagnosa tentatif yang tepat dan efektif dilakukan sebelum kultur bakteri adalah pengamatan gejala klinis, pemeriksaan fisik, pemeriksaan USG, dan urinalisis serta kucing penderita UTI yang disebabkan oleh bakteri *S.epidermidis*, *S.aureus*, *S.uberis*, *E.fecalis*, *Bacillus sp*, *E.coli*, *P.aeruginosa*, *Klebsiella sp.*, *Proteus sp.* dan *Enterobacter sp.* dapat diberikan terapi kausatif *gentamycin*, *amoxicillin* dan *meropenem*.

**Kata Kunci:** UTI, kucing, diagnosa klinis, diagnosa laboratoris, terapi kausatif.

## **Antibiotic Study Based on Bacterial Sensitivity in Feline Urinary Tract Infection Cases at the Sleman District Veterinary Clinic Yogyakarta Special Region Province**

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### **Abstract**

Urinary tract infection (UTI) is a disorder of the urinary system, especially the urinary bladder and urethra which can be caused by bacterial infection. Testing for isolation and identification of bacteria from urine samples (gold standard diagnosis) is rarely done because it takes a long time. This study aims to determine tentative diagnostic methods that are effective for veterinarians, find out the bacteria that cause UTI and the appropriate antibiotics for UTI cases treatment in cats, especially in Sleman Regency, Yogyakarta Special Province. Sixteen cats were examined from anamnesis, clinical and laboratory examinations (physical examination, ultrasound examination (USG), urinalysis, hematological examination, bacterial culture). Cats diagnosed with UTI are continued with antibiotic sensitivity testing. The entire data obtained was analyzed descriptively. The results showed that clinical symptoms in cats with UTI were dominated by dysuria, hematuria, stranguria, pollakiuria and decreased appetite. Changes in shape, wall thickening and the discovery of uroliths in the lumen were found on the ultrasound examination of the bladder of cats with UTI. Discoloration, turbidity, crystals, protein, leukocytes and blood were also found in the urine of cats with UTI. The bacteria found included *Staphylococcus epidermidis*, *Staphylococcus aureus*, *Streptococcus uberis*, *Enterococcus fecalis*, *Bacillus sp*, *Escherichia coli*, *Pseudomonas aeruginosa*, *Klebsiella sp.*, *Proteus sp.* and *Enterobacter sp.* also predominately sensitive to the gentamicin, amoxicillin and meropenem antibiotics. Based on the data obtained in this study it was concluded that appropriate and effective tentative diagnostic methods were carried out before bacterial culture including observation of clinical symptoms, physical examination, ultrasound examination, and urinalysis as well as cats with UTI caused by *S.epidermidis*, *S.aureus*, *S. uberis*, *E.fecalis*, *Bacillus sp*, *E.coli*, *P.aeruginosa*, *Klebsiella sp.*, *Proteus sp.* and *Enterobacter sp.*, gentamycin, amoxicillin and meropenem causative therapy can be given.

**Keywords:** UTI, cat, clinical diagnosis, laboratory diagnosis, causative therapy.