

## INTISARI

### **STUDI JENIS KRISTALURIA, NILAI *BLOOD UREA NITROGEN* DAN KREATININ PADA KUCING PENDERITA OBSTRUKSI URETRA**

**Heldiar Soedarmanto**

**17/414491/KH/09378**

Obstruksi uretra merupakan salah satu penyebab *feline lower urinary tract disease* (FLUTD). Penyakit ini sering terjadi akibat adanya sumbatan kristaluria pada saluran urinaria. Tujuan penelitian ini adalah untuk mengetahui jenis kristal, nilai *blood urea nitrogen* (BUN), dan nilai kreatinin pada kucing yang mengalami obstruksi uretra. Sebanyak 24 ekor kucing yang didiagnosa mengalami obstruksi uretra digunakan dalam penelitian ini. Pemeriksaan kristaluria dilakukan dengan uji sedimentasi sedangkan pemeriksaan kadar BUN dan kreatinin menggunakan alat spektrofotometer. Hasil pemeriksaan pada kucing yang mengalami obstruksi uretra terjadi pada 18/24 ekor (75%) kucing jantan dan 6/24 ekor (25%) kucing betina. Jenis kristaluria pada 24 ekor kucing yang mengalami obstruksi uretra ditemukan 10/24 (42%) struvit, 7/24 (29%) oksalat, 2/24 (8%) amorf, 1/24 (4%) *cystine*, 1/24 (4%) *cast*, dan 3/24 (13%) campuran struvit-oksalat. Hasil pemeriksaan kadar BUN dan kreatinin pada 18 sampel diketahui 9/18 ekor (50%) sampel memiliki nilai BUN lebih tinggi dari nilai standar dan 6/18 ekor (33%) sampel memiliki nilai kreatinin lebih tinggi dari nilai standar. Berdasarkan hasil tersebut disimpulkan bahwa obstruksi uretra memiliki peluang lebih tinggi pada kucing jantan daripada kucing betina, struvit merupakan kristal yang lebih sering ditemukan pada kasus obstruksi uretra pada kucing, serta perubahan kadar BUN dan kreatinin tidak sepenuhnya dapat digunakan sebagai analisa diagnostik tunggal pada kasus obstruksi uretra.

**Kata kunci:** kucing, obstruksi uretra, kristaluria, BUN, kreatinin.

## **ABSTRACT**

### **STUDY TYPES OF CRYSTALLURIA, BLOOD UREA NITROGEN AND CREATININE LEVELS IN CATS THAT SUFFERING URETHRAL OBSTRUCTION**

**Heldiar Soedarmanto**  
**17/414491/KH/09378**

Urethral obstruction is one of the causes of the feline lower urinary tract disease (FLUTD). This disease is a common disease that caused by a plug or blockage of crystalluria in urinary tract. The aims of this study was to determine the type of crystals, *blood urea nitrogen* (BUN) levels, and creatinine levels in cats that suffering urethral obstruction. This study used 24 cats that were diagnosed for urethral obstruction. Examination of crystalluria was examined by sedimentation test, while BUN and creatinine levels were examined using spectrophotometer. The results of the examination on cats with urethral obstruction occurred in 18/24 (75%) male cats and 6/24 (25%) female cats. Type of crystalluria in 24 individuals examination were 10/24 (42%) struvite, 7/24 (29%) oxalate, 2/24 (8%) amorphous, 1/24 (4%) cystine, 1/24 (4%) cast, and 3/24 (13%) struvite-oxalate mixture. The results of the examination of BUN and creatinine levels in 18 sampels showed that 9/18 (50%) sampels had a higher BUN value than the standart value and 6/18 (33%) sampels had a higher creatinine value than the standard value. In conclusion that urethral obstruction have a higher chance to be occured in male cats than the female cats, struvite is a crystal which more likely to be found in cases of urethral obstruction in cats, and the changes of BUN and creatinine levels cannot be fully used as a single diagnostic analysis in urethral obstruction case.

**Keywords:** cat, urethral obstruction, crystalluria, BUN, creatinine