



ABSTRAK

EFEK KASTRASI TERHADAP BERAT JENIS URIN PADA KUCING DOMESTIK (*Felis domestica*)

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Studi pada kucing tentang efek kastrasi sejauh ini hanya terbatas pada survey populasi yang menunjukkan adanya penurunan kadar feline urin dan cauxin urin setelah kastrasi. Penelitian ini bertujuan untuk melihat efek kastrasi terhadap berat jenis urin pada kucing domestik. Delapan ekor kucing domestik jantan usia satu hingga dua tahun digunakan dalam penelitian ini. Kucing dibagi menjadi dua kelompok, yaitu empat ekor kucing pada kelompok kastrasi (K) yang dioperasi kastrasi (*bilateral orchectomy*) dan empat ekor kucing lainnya pada kelompok kontrol (N) yang dilakukan operasi kastrasi palsu (*sham-castrated*). Koleksi sampel urin dilakukan dengan metode kateterisasi pada hari ke-7 sebelum kastrasi dan hari ke-28 setelah kastrasi. Intake minum selama satu hari sebelum koleksi sampel urin diukur volumenya berdasarkan selisih volume pemberian dan volume air minum tersisa. Berat jenis urin diukur menggunakan strip urin. Hasil pengujian didapatkan bahwa rata-rata berat jenis urin pada kelompok perlakuan (K) sesudah kastrasi turun secara signifikan dari $1,045 \pm 0,006$ menjadi $1,025 \pm 0,006$ ($P<0,05$) dan pada kelompok kontrol (N) berat jenis urin tidak berubah secara signifikan dari $1,045 \pm 0,006$ menjadi $1,048 \pm 0,005$ ($P>0,05$). Berdasarkan hasil penelitian dapat disimpulkan bahwa kastrasi menurunkan berat jenis urin.

Kata kunci: Berat jenis urin, kastrasi, kucing.



ABSTRACT

EFFECTS OF CASTRATION ON URINE SPECIFIC GRAVITY (USG) IN DOMESTIC CATS (*Felis domestica*)

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Studies in cats on the effects of castration have so far been limited to population surveys showing a decrease in urinary feline and urinary cauxin levels after castration. This study aims to see the effect of castration on urine specific gravity (USG) in domestic cats. Eight male domestic cats aged one to two years were used in this study. Cats were divided into two groups, four cats in the castration group (K) which were castrated (bilateral orchectomy) and four other cats in the control group (N) which were sham-castrated. Urine sample collection was carried out using the catheterization method on the 7th day before castration and 28th day after castration. Water intake for one day before urine sample collection was measured in volume based on the difference between the volume given and the volume of remaining drinking water. Urine specific gravity (USG) was measured using urine strips. The research results showed that the mean of urine specific gravity (USG) in castration group (K) after castration decreased significantly from 1.045 ± 0.006 to 1.025 ± 0.006 ($P < 0.05$), whereas urine specific gravity (USG) from control group (N) showed no significant difference from 1.045 ± 0.006 to 1.048 ± 0.005 ($P > 0.05$). Based on the results of the study, it can be concluded that castration reduces the urine specific gravity (USG).

Keywords: Urine specific gravity (USG), castration, cat.