

## ABSTRAK

### **PENGARUH PEMBERIAN *HUMAN SERUM ALBUMIN* 20% TERHADAP GAMBARAN NILAI LEUKOSIT, TROMBOSIT, ALBUMIN, DAN TOTAL PROTEIN PLASMA PADA KUCING YANG MENGALAMI HIPOALBUMINEMIA**

Oleh

**Ryan Hadi Permana**  
**15/377775/KH/08498**

Komplikasi sejumlah penyakit dapat menimbulkan terjadinya hipoalbuminemia. Kondisi tersebut dapat juga mempengaruhi nilai leukosit, trombosit, albumin, dan total protein plasma (TPP) yang tergambarkan melalui pemeriksaan hematologi. Hipoalbuminemia atau penurunan kadar albumin dapat menyebabkan efektivitas kerja obat dan proses kesembuhan penyakit menjadi terhambat, sehingga peningkatan kadar albumin perlu dilakukan salah satunya dengan pemberian terapi *Human Serum Albumin* (HSA). Penelitian ini bertujuan untuk mengetahui pengaruh pemberian HSA 20% terhadap gambaran nilai leukosit, trombosit, albumin, dan TPP pada kucing yang terdiagnosa hipoalbuminemia.

Sebelum perlakuan, sampel darah diambil dari 7 ekor kucing terdiagnosa sakit untuk dilakukan pemeriksaan hematologi. Kemudian, kucing diterapi HSA 20% yang dilarutkan dalam NaCl 0,9% (1:9) secara intravena selama 2-4 jam. Sehari setelah terapi HSA 20%, dilakukan pemeriksaan hematologi kembali. Data penelitian berupa nilai leukosit, trombosit, albumin, dan TPP sebelum dan sesudah terapi HSA 20% dianalisis secara statistik menggunakan pengujian parametrik *Paired Sample T-Test* atau pengujian non parametrik *Wilcoxon Signed Ranks Test* pada program SPSS.

Hasil penelitian menunjukkan adanya kenaikan kadar albumin secara signifikan ( $p < 0,05$ ) setelah terapi HSA 20%, tetapi tidak ada perbedaan nyata ( $p > 0,05$ ) terhadap nilai leukosit, trombosit dan kadar TPP terhadap 7 ekor kucing setelah terapi HSA 20%.

Kata kunci : Hipoalbuminemia, *Human Serum Albumin*, Kucing.

## **ABSTRACT**

### **EFFECT OF ADMINISTRATION HUMAN SERUM ALBUMIN 20% TO REPRESENTATION OF LEUKOCYTE, THROMBOCYTE, ALBUMIN, AND TOTAL PLASMA PROTEIN (TPP) ON HYPOALBUMINEMIC CATS**

**By**  
**Ryan Hadi Permana**  
**15/377775/KH/08498**

Complication of diseases can cause hypoalbuminemia. These conditions can also affect the value of leukocytes, thrombocyte, albumin, and total plasma protein (TPP) which are described through hematological examination. Hypoalbuminemia or decrease of albumin levels can inhibit drug effectiveness and postpone recovery, so the increase of albumin levels is needed through the administration of HSA 20%. The aim this study is to know the effect of HSA 20% administration on cats diagnosed with hypoalbuminemia described by value of leukocyte, thrombocyte, albumin, and total plasma protein.

Before treatment, blood sampel was collected from 7 sick cats with hypoalbuminemia for hematology examination. Then, animals treated with HSA 20% diluted in NaCl 0.9% (1: 9) through intravenous for 2-4 hours. One day after treatment, we run another hematology examination. The data obtained in the form of examination data of leukocyte, thrombocyte, albumin, and TPP value before and after administration HSA 20% were analyzed statistically by using a parametric Paired Sample T-Test or non parametric Wilcoxon Signed Ranks Test on SPSS program.

The result of these study show that albumin value before HSA 20% was significantly different from the value of albumin level after HSA 20% therapy ( $p < 0.05$ ), but there were no significant differences ( $p > 0.05$ ) on leukocyte, platelet and TPP levels in 7 sick cats after HSA 20% therapy.

**Keyword :** Hypoalbuminemia, human serum albumin, cat.