

ABSTRAK

Pengaruh Penggunaan Propofol 1% terhadap Perubahan Konsentrasi Alanine Aminotransferase (ALT) dan Aspartate Aminotransferase (AST) pada Plasma Darah Anjing Domestik 25 Menit Pascainjeksi

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Anestesi merupakan hal yang vital dalam prosedur pembedahan. Ketepatan jenis, dosis, rute, dan sediaan sangat penting untuk diperhatikan. Tujuan penelitian ini adalah untuk mengetahui korelasi perubahan gambaran darah anjing akibat pemberian anestetika propofol 1% sebelum dan 25 menit pascainjeksi. Digunakan 4 ekor anjing domestik sehat berjenis kelamin jantan dari asal yang sama. Anjing diambil darahnya dan dimasukkan ke dalam tabung Heparin berukuran 0,5 ml sebelum diberikan perlakuan. Anjing diinduksi dengan propofol 1% dengan dosis 7 mg/kg berat badan, kemudian keempat anjing diambil kembali darahnya dan dimasukkan kedalam tabung Heparin. Sampel darah dikirim dan diperiksa di laboratorium Naroo Pet Sleman, selanjutnya dianalisis menggunakan program aplikasi SPSS (*Statistical Package for Social Sciences*) dengan metode *Paired T-test*. Hasil penelitian profil *Alanine Aminotransferase* (ALT) dan *Aspartate Aminotransferase* (AST) secara umum menunjukkan konsentrasi normal dan analisis data menggunakan *Paired T-test* menunjukkan bahwa tidak ada perbedaan yang signifikan ($P > 0,05$) dari kadar AST maupun ALT antara data sebelum dan 25 menit sesudah induksi propofol pada anjing. Keempat sampel, baik analisis kadar AST maupun ALT menunjukkan perubahan yang tidak konstan dengan nilai bervariasi. Dapat disimpulkan bahwa anestesi propofol 1% tidak menyebabkan kenaikan konsentrasi ALT dan AST anjing.

Kata kunci: propofol, anestesi, anjing, fungsi hati, *Alanine Aminotransferase* (ALT), *Aspartate Aminotransferase* (AST)

ABSTRACT

Effect of 1% Propofol Use on Changes in Alanine Aminotransferase (ALT) and Aspartate Aminotransferase (AST) Concentrations in Blood Plasma of Domestic Dogs 25 Minutes Post Injection

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Anesthesia is vital in surgical procedures. The accuracy of type, dose, route, and preparation is very important to note. The purpose of this study was to determine the correlation of changes in the blood picture of dogs due to the administration of 1% propofol anesthetics before and 25 minutes postinjection. Four healthy domestic dogs of male sex from the same origin were used. Dogs were blood drawn and put into a 0.5 ml Heparin tube before treatment. Dogs were induced with 1% propofol at a dose of 7 mg/kg body weight, then the four dogs had their blood drawn and put into Heparin tubes. Blood samples were sent and examined at the Naroo Pet Sleman laboratory, then analyzed using the SPSS (Statistical Package for Social Sciences) application program with the Paired T-test method. The results of the Alanine Aminotransferase (ALT) and Aspartate Aminotransferase (AST) profiles generally showed normal concentrations and data analysis using Paired T-test showed that there was no significant difference ($P>0.05$) of AST or ALT levels between data before and 25 minutes after propofol induction in dogs. All four samples, both AST and ALT level analysis showed inconstant changes with varying values. It can be concluded that 1% propofol anesthesia does not cause an increase in ALT and AST concentrations in dogs.

Key words: propofol, anesthesia, canine, liver function, Alanine Aminotransferase (ALT), Aspartate Aminotransferase (AST)