

## **INTISARI**

### **GAMBARAN DARAH ERITROSIT DAN HEMOGLOBIN TIKUS PADA MINGGU 1-4 PASCA LIGASI URETER KANAN DISTAL**

**Wan Syarifah Faizah**

Ginjal adalah organ yang memiliki peran penting dalam metabolisme. Fungsi utama ginjal adalah sebagai ekskresi, keseimbangan air dan elektrolit, serta endokrin. Selain dari fungsi tersebut fungsi ginjal yang penting adalah sebagai tempat produksi eritropoietin untuk memicu produksi sel darah merah. Tujuan penelitian ini adalah mengetahui jumlah eritrosit dan kadar hemoglobin tikus yang mengalami gangguan ginjal akibat obstruksi ureter unilateral pada tikus *Sparague Dawley*. Tiga ekor tikus *Sparague Dawley*, umur 2,5 bulan digunakan sebagai hewan percobaan. Hewan coba dilaparotomi kemudian diligasi pada bagian distal ureter kanan selama 4 minggu. Sampel darah dikumpulkan untuk menghitung jumlah eritrosit dan kadar hemoglobin segera setelah penelitian selesai. Data yang dikumpulkan dianalisis dengan menggunakan analisis variansi satu arah ( $P \leq 0,05$ ). Hasil penelitian menunjukkan bahwa tidak ada perbedaan yang signifikan antara kontrol dan perlakuan. Berdasarkan analisis di atas, dapat disimpulkan bahwa ligasi tidak mengubah jumlah eritrosit dan kadar hemoglobin ( $P \geq 0,05$ ).

Kata kunci : Obstruksi ureter, ginjal, eritrosit, eritropoietin, hemoglobin.

## **ABSTRACT**

### **TOTAL ERYTHROCYTES AND HEMOGLOBIN CONCENTRATION OF RATS IN THE FIRST WEEK UNTIL FOURTH WEEK AFTER THE LIGATION OF RIGHT DISTAL URETER**

**Wan Syarifah Faizah**

Kidney is an organ that has an important role in metabolism. The main function of the kidney is as an excretory, electrolytes/water imbalance or as an endocrine organ. In addition, kidney also has an important function as eritropoietin producer to trig red blood cells production. This study was conducted to determine total erythrocyte and hemoglobin concentration in *Sparague Dawley* rats with renal impairment due to unilateral ureteral obstruction. Three *Sparague Dawley* rats, 2.5 months of age were used as experimental animals. The animals were laparatomized and then the distal of right ureter was ligated for 4 weeks. Blood samples were collected for total erythrocyte and hemoglobin concentration, soon after the study was finished. The data collected were analyzed using analysis of variance  $P \leq 0.05$ . The results showed that there are not any significant differences between control and treatment. From the analysis above, it can be concluded that ligation did not change the total erythrocyte and hemoglobin concertation ( $P \geq 0.05$ ).

Key word : Obstruction ureters, kidney, erythrocytes, eritropoietin, hemoglobin.