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**Analisis Perbandingan Profil Hematologi Selama dan Setelah Puasa
Ramadan Pada Mahasiswa Jurusan Teknologi Laboratorium Medis**

XVI + 45 halaman, 11 tabel, 10 gambar, dan 23 lampiran

ABSTRAK

Puasa ramadan dapat memicu proses autophagi sehingga dapat mempengaruhi sel darah dan dapat menyebabkan beberapa perubahan dalam parameter hematologi. Tujuan penelitian ini adalah menganalisis perbandingan profil hematologi selama dan setelah puasa ramadan pada laki-laki sehat. Jenis penelitian ini adalah penelitian analitik dengan desain penelitian *cross sectional*. Analisa data yang digunakan adalah Uji *Paired T Test* dan Uji *Wilcoxon*. Penelitian ini dilakukan pada mahasiswa laki laki sehat yang menjalankan puasa ramadan sampai hari ke 25 dan dibandingkan dengan seminggu setelah puasa ramadan. Penelitian dilaksanakan dengan melakukan pemeriksaan profil hematologi menggunakan *hematology analyzer Mindray BC 3600*. Hasil penelitian menunjukkan bahwa: Sampel terbanyak berusia 20 tahun (33.3%), Menjalankan sahur secara penuh (41.7%), mengkonsumsi rokok (37.5%), dan beraktivitas ringan (83.4%). Nilai profil hematologi selama puasa ramadan dan setelah puasa ramadan didominasi dengan nilai normal. Rerata selama dan setelah puasa ramadan menunjukkan tidak adanya perubahan dari jumlah eritrosit, rerata pada pemeriksaan hemoglobin, hematokrit, trombosit, dan granulosit mengalami kenaikan dan rerata jumlah leukosit limfosit dan mix sel mengalami penurunan. Adanya perbedaan signifikan selama dan setelah pada kadar hemoglobin dengan $P\text{-value} = 0.026$, hematokrit $P\text{-value} = 0.000$, dan mix sel $P\text{-value} = 0.000$. Sedangkan pada pemeriksaan eritrosit $P\text{-value} = 0.094$, trombosit $P\text{-value} = 0.793$, leukosit $P\text{-value} = 0.977$, limfosit $P\text{-value} = 0.277$, granulosit $P\text{-value} = 0.296$ menunjukkan tidak ada perbedaan yang signifikan.

Kata Kunci : Ramadan, Puasa, Hematologi.

Daftar Bacaan : 65 (1994 – 2023)

**TANJUNGKARANG MINISTRY OF HEALTH POLYTECHNIC
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Comparative Analysis of Hematological Profil During and After Ramadan Fasting in Medical Laboratory Technology Students

XVI + 45 page, 8 table, 10 image, dan 23 attachments

ABSTRAC

Ramadan fasting can trigger autophagic processes, affecting blood cells and altering hematological parameters. The aim of this study is to analyze the comparison of hematological profiles during and after Ramadan fasting in healthy men. This type of research is analytical research with cross sectional research design. The data analysis used is the Paired T Test and the Wilcoxon Test. The study was conducted on healthy male students who fasted until the 25th day of Ramadan and compared with a week after Ramadan. The research was carried out by conducting a hematological profile examination using hematology analyzer Mindray BC 3600. The results of the study showed that: Most samples were 20 years old (33.3%), Running a full sahur (41.7%), smoking (37.5%), and were mildly active (83.4%). Hematological profile values during Ramadan fast and after Ramadan are dominated by normal values. Rarities during and after Ramadan fast showed no change in the number of erythrocytes, the rate of hemoglobin, hematocrites, thrombocytes and granulocyte tests increased, and the rates of lymphocyte leukocyte count and cell mix decreased There were significant differences during and after in hemoglobin levels with P-value= 0.026, hematocrit P-value= 0.000, and cell mix P-value= 0.000. Meanwhile, examination of erythrocytes P-value =0.094, platelets P-value =0.793, leukocytes P-value =0.977, lymphocytes P-value =0.277, granulocytes P-value =0.296 showed no significant difference.

Password : Ramadan, Fasting, Hematology.

Reading List: 65 (1994 – 2023)