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**Perbandingan Jenis Leukosit dan Laju Endap Darah (LED) pada Perempuan
Dewasa Muda dengan Obesitas *Pre* dan *Post Circular Exercise***

xvi + 47 halaman, 7 tabel, 14 gambar, dan 11 lampiran

ABSTRAK

Obesitas merupakan kondisi penumpukan lemak tubuh yang berlebihan dan dapat menyebabkan peradangan kronik tingkat rendah. Salah satu indikator terjadinya peradangan dalam tubuh adalah peningkatan jumlah leukosit dan laju endap darah. Penelitian ini bertujuan untuk mengetahui perbandingan jenis leukosit dan Laju Endap Darah pada perempuan dewasa muda dengan melakukan circular exercise. Jenis penelitian analitik dengan cross-sectional. Penelitian dilakukan di Jurusan Teknologi Laboratorium Medis, waktu penelitian bulan Mei-Juni 2025, jumlah sampel 19 responden. Hasil penelitian pada pasien obesitas *pre exercise* basofil mean sebesar 0,00%, mean eosinofil sebesar 1,10%, neutrofil stab mean sebesar 2,57%, neutrofil segmen mean sebesar 71,37%, limfosit mean sebesar 20,37%, Monosit mean sebesar 5,10%. Jenis leukosit *post* mean sebesar 0,000%, eosinofil mean sebesar 1,26 %, neutrofil stab mean sebesar 5,31 %, neutofil segmen mean sebesar 67,37%, limfosit mean sebesar 17,16%. Monosit mean sebesar 8,52%. Laju Endap Darah *pre* mean adalah 21,68 mm/jam, dan *post* sebesar 19,47 mm/jam. Hasil analisis statistik menunjukkan terdapat perbedaan nilai neutrofil stab, monosit dengan p-value ($< 0,05$), serta tidak terdapat perbedaan pada nilai basofil, eosinofil, neutrofil segmen, limfosit dan Laju Endap Darah dengan p-value ($> 0,05$).

Kata kunci : Obesitas, *Circular Exercise*, Leukosit, Laju Endap Darah (LED), inflamasi

Daftar Bacaan : 32 (2000-2024)

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Comparison of Leukocyte Types and Blood Sedimentation Rate (BSR) in Young Adult Women with Pre and Post Circular Exercise Obesitas

xvi + 47 pages, 7 tables, 14 images, and 11 attachment

ABSTRACT

Obesity is a condition of excessive body fat accumulation and can cause low-grade chronic inflammation. One indicator of inflammation in the body is an increase in the number of leukocytes and erythrocyte sedimentation rate. This study aims to determine the comparison of leukocyte types and erythrocyte sedimentation rate in young adult women by doing circular exercise. This type of analytical research is cross-sectional. The study was conducted at the Department of Medical Laboratory Technology, the research period was May-June 2025, the number of samples was 19 respondents. The results of the study in obese patients pre-exercise mean basophils of 0.00%, mean eosinophils of 1.10%, mean stab neutrophils of 2.57%, mean segment neutrophils of 71.37%, mean lymphocytes of 20.37%, mean monocytes of 5.10%. The mean post leukocyte type was 0.000, the mean eosinophil was 1.26%, the mean stab neutrophil was 5.31%, the mean segment neutrophil was 67.37%, the mean lymphocyte was 17.16%. The mean monocyte was 8.52%. The mean pre Erythrocyte Sedimentation Rate was 21.68 mm/hour, and the mean post Erythrocyte Sedimentation Rate was 19.47 mm/hour. The results of statistical analysis showed that there were differences in the values of stab neutrophils, monocytes with a p-value (<0.05), and there were no differences in the values of basophils, eosinophils, segment neutrophils, lymphocytes and Erythrocyte Sedimentation Rate with a p-value (>0.05).

Keyword : Obesity, Circular Exercise, Leukocytes, Erythrocyte Sedimentation Rate (ESR), inflammation

Reading list : 32 (2000-2024)