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Hubungan kadar *Neutrophile Lymphocyte Ratio (NLR)* dengan Laju Endap Darah (LED) pada pasien *Rheumatoid Arthritis* di RSUD Dr. H. Abdul Moeloek

xvi + 41 halaman, 10 tabel, 10 gambar, dan 16 lampiran

ABSTRAK

Rheumatoid Arthritis (RA) merupakan penyakit autoimun kronik yang ditandai dengan peradangan sinovial dan kerusakan sendi. Pemeriksaan laboratorium seperti *Neutrophile lymphocyte ratio* (NLR) dan Laju Endap Darah (LED) dapat digunakan untuk mengetahui aktivitas inflamasi pada pasien RA. NLR merupakan parameter hematologi sederhana yang mencerminkan aktivitas inflamasi sistemik, sementara LED sering digunakan untuk memonitoring penyakit dan respon terhadap pengobatan. Penelitian ini bertujuan untuk mengetahui hubungan kadar NLR dengan LED pada pasien RA di RSUD Dr. H. Abdul Moeloek. Penelitian ini dilakukan pada bulan Mei-Juni 2025. Populasi dalam penelitian ini ialah pasien RA yang berobat jalan pada bulan Mei-Juni 2025. Sampel berjumlah 34 pasien RA yang diambil secara purposive sampling berdasarkan kriteria inklusi. Hasil penelitian didapatkan responden dengan jenis kelamin terbanyak adalah perempuan sebanyak 26 responden (76,5%) dan kelompok usia terbanyak adalah 40-59 tahun sebanyak 17 responden (50,0%). Dengan nilai rata-rata NLR pasien adalah $7,4 \pm 10,0$ dan LED sebesar $51,8 \pm 39,2$ mm/jam. Hasil uji korelasi *Spearman* menunjukkan terdapat hubungan positif sedang antara NLR dan LED ($p = 0,000$; $r = 0,562$), yang berarti semakin tinggi kadar NLR maka semakin tinggi nilai LED. Kesimpulan menunjukkan adanya hubungan yang signifikan antara kadar NLR dengan LED pada pasien *Rheumatoid Arthritis*.

Kata kunci: *Rheumatoid Arthritis, Neutrophile Lymphocyte Ratio (NLR), Laju Endap Darah (LED), inflamasi.*
Daftar Bacaan: 34 (2013-2025)

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The Correlation Between Neutrophil Lymphocyte Ratio (NLR) and Erythrocyte Sedimentation Rate (ESR) in Patients with Rheumatoid Arthritis at Dr. H. Abdul Moeloek Regional Hospital

xvi + 41 pages, 10 tables, 10 figures, and 16 attachment

ABSTRACT

Rheumatoid arthritis (RA) is a chronic autoimmune disease characterized by synovial inflammation and joint damage. Laboratory tests such as the neutrophil lymphocyte ratio (NLR) and erythrocyte sedimentation rate (ESR) can be used to assess inflammatory activity in RA patients. The NLR is a simple hematological parameter that reflects systemic inflammatory activity, while the ESR is often used to monitor disease and response to treatment. This study aims to determine the correlation between NLR and ESR levels in RA patients at Dr. H. Abdul Moeloek Regional Hospital. The study was conducted from May to June 2025 using a cross-sectional analytic design. A total of 34 RA patients were selected through purposive sampling based on inclusion criteria. The results showed that the majority of respondents were female with 26 respondents (76.5%), with the most common age groups being 40-59 age with 17 respondents (each 26.5%). The average NLR value was 7.4 ± 10.0 and the mean ESR was 51.8 ± 39.2 mm/hour. Spearman correlation test revealed a moderate positive correlation between NLR and ESR ($p = 0.000$; $r = 0.562$), indicating that higher NLR levels are associated with higher ESR values. Conclusion: There is a significant correlation between NLR and ESR levels in RA patients.

Keywords: Rheumatoid Arthritis, Neutrophil Lymphocyte Ratio (NLR),
Erythrocyte Sedimentation Rate (ESR), inflammation.

Reading list: 34 (2013-2025)