

ABSTRAK

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KORELASI RASIO MONOSIT LIMFOSIT DAN RASIO NEUTROFIL LIMFOSIT SEBAGAI BIOMARKER INFLAMASI ATEROSKLEROSIS

1x + 71 halaman + 5 tabel + 8 lampiran

Aterosklerosis adalah kondisi medis yang ditandai dengan penumpukan plak di dalam dinding arteri, yang dapat menyebabkan penyempitan dan pengerasan pembuluh darah, serta meningkatkan risiko terjadinya penyakit jantung koroner (PJK). Penelitian ini bertujuan untuk menganalisis korelasi antara rasio monosit-limfosit (RML) dan rasio neutrofil-limfosit (RNL) sebagai biomarker inflamasi dalam perkembangan aterosklerosis pada pasien PJK. Desain penelitian yang digunakan analitik observasional dan pendekatan cross-sectional, data dikumpulkan dari 50 pasien dengan penyakit jantung yang menjalani pemeriksaan darah rutin di RSUD Ibnu Sina, pada pengambilan sampel menggunakan metode purposive sampling. Metode pemeriksaan darah lengkap menggunakan metode *Flow Cytometry*. Hasil penelitian menunjukkan bahwa RML dan RNL didapatkan hasil untuk rata-rata (*mean*) berkisar sekitar 0,33. Peningkatan kadar RML dan RNL terkait dengan peningkatan risiko komplikasi kardiovaskular, seperti serangan jantung dan stroke. Hasil analisis statistik menggunakan uji *Spearman* menunjukkan adanya korelasi yang cukup kuat antara kedua rasio tersebut. Dari hasil uji korelasi *Spearman* dapat disimpulkan bahwa terdapat korelasi antara Rasio Monosit Limfosit dan Rasio Neutrofil Limfosit hasil nilai signifikansi sebesar $p=0,612$ dengan nilai $\alpha=0,05$ menunjukkan bahwa terdapat korelasi kuat antara RML & RNL pada Pasien Aterosklerosis.

Kata kunci: Aterosklerosis, Rasio Monosit-Limfosit (RML), Rasio Neutrofil-Limfosit (RNL), Penyakit Jantung Koroner, Biomarker Inflamasi.

Daftar bacaan: 13 buku (2015-2024)

ABSTRACT

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THE CORRELATION BETWEEN MONOCYTE-TO-LYMPHOCYTE RATIO AND NEUTROPHIL-TO-LYMPHOCYTE RATIO AS INFLAMMATORY BIOMARKERS IN ATHEROSCLEROSIS

1x + 71 pages + 10 Tables + 8 Appendices

Atherosclerosis is a medical condition characterized by a buildup of plaque within the walls of the arteries, which can lead to narrowing and hardening of blood vessels, as well as increasing the risk of coronary heart disease (CHD). This study aims to analyze the correlation between monocyte-lymphocyte ratio (RML) and neutrophil-lymphocyte ratio (RNL) as inflammatory biomarkers in the development of atherosclerosis in CHD patients. The research design used observational analytics and cross-sectional approaches, data were collected from 50 patients with heart disease who underwent routine blood tests at Ibnu Sina Hospital, in sampling using the purposive sampling method. The complete blood test method uses the Flow Cytometry method. The results showed that RML and RNL obtained results for a mean of around 0.33. Increased levels of RML and RNL are associated with an increased risk of cardiovascular complications, such as heart attack and stroke. The results of statistical analysis using the Spearman test show that there is a fairly strong correlation between the two ratios. From the results of the Spearman correlation test, it can be concluded that there is a correlation between the Ratio of Lymphocyte Monocytes and the Ratio of Lymphocytes Neutrophil resulting from a significance value of $p = 0.612$ with a value of $\alpha = 0.05$ indicating that there is a strong correlation between RML & RNL in Atherosclerosis Patients.

Keywords: Atherosclerosis, Monocyte-Lymphocyte Ratio (RML), Neutrophil-Lymphocyte (RNL) Ratio, Coronary Heart Disease, Inflammatory Biomarkers.

References: 13 books (2015-2024)