

ABSTRAK

Latar belakang: DMT2 merupakan penyakit metabolik yang dapat menimbulkan peradangan kronis tingkat rendah berkaitan dengan terjadinya resistensi insulin. Rasio neutrofil limfosit pada beberapa tahun terakhir menjadi petanda potensial terjadinya peradangan kronis. Abnormalitas profil lipid terjadi karena lipotoksitas akibat resistensi insulin.

Tujuan: Membuktikan hubungan antara RNL dengan profil lipid pada penderita DMT2.

Metode: Penelitian observasional analitik dengan pendekatan belah lintang terhadap 45 catatan medis penderita DMT2 yang mendapat perawatan di RS Nasional Diponegoro Semarang. Penelitian dilakukan pada Oktober-November 2022. Pengambilan data dilakukan secara *consecutive sampling*. Analisis hubungan antara RNL dan profil lipid menggunakan uji korelasi *spearman*.

Hasil: Uji korelasi spearman menunjukkan bahwa terdapat hubungan antara RNL dengan kadar HDL-K ($p=0,035$, $r=-0,315$), dan tidak didapatkan hubungan antara RNL dengan kadar kolesterol total ($p=0,061$, $r=-0,281$), kadar LDL-K ($p=0,170$, $r=-0,208$), dan kadar trigliserida ($p=0,563$, $r=-0,089$).

Kesimpulan: Terdapat hubungan negatif lemah antara RNL dengan profil lipid yaitu HDL-K pada penderita DMT2, namun tidak terdapat hubungan antara RNL dengan profil lipid lain.

Kata kunci: RNL, profil lipid, kolesterol total, HDL-K, LDL-K, trigliserida, DMT2

ABSTRACT

Background: *Type 2 diabetes mellitus is a metabolic disease that can cause low-grade chronic inflammation related to insulin resistance. Recently, neutrophil to lymphocyte has become a potential marker of chronic inflammation. An abnormal lipid profile occurs due to lipotoxicity from insulin resistance.*

Aim: *To prove the correlation between NLR and lipid profiles in T2DM patients.*

Method: *An analytic observational study used a cross-sectional approach to 45 medical records of T2DM patients who received treatment at RS Nasional Diponegoro Semarang. This study was conducted from October to November 2022. Data was collected using consecutive sampling. Analysis of the correlation between NLR and lipid profiles used spearman's correlation test.*

Results: *Spearman's correlation test proved a correlation between NLR and HDL-c levels ($p=0.035$, $r = -0.315$). There was no correlation between NLR and total cholesterol levels ($p=0.061$, $r = -0.281$), LDL-c levels ($p=0.170$, $r=-0.208$), and triglyceride levels ($p=0.563$, $r=-0.089$).*

Conclusion: *There was a weak negative correlation between NLR and HDL-c levels in T2DM patients, but there was no correlation between NLR and other lipid profiles.*

Keywords: *NLR, lipid profile, total cholesterol, HDL-c, LDL-c, triglyceride, T2DM*