ABSTRAK

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HUBUNGAN KADAR HbA1C DENGAN *NEUTROPHIL LYMPHOCYTERATIO*, DAN *PLATELET LYMPHOCYTE RATIO* PADA PENDERITA DIABETES MELITUS TIPE 2 KELOMPOK PROLANIS

1x + 73 Halaman + 14 Tabel + 8 gambar + 7 Lampiran

Diabetes mellitus masih menjadi 10 penyakit penyebab kematian di seluruh dunia. Pemeriksaan HbA1c adalah pemeriksaan laboratorium untuk mengetahui kadar glukosa rata-rata pada periode 120 hari. NLR dan PLR meningkat seiring dengan tingkat keparahan resistensi insulin yang menjadi penanda telah terjadi inflamasi didalam tubuh. Penelitian ini tujuannya guna menganalisis hubungan kadar HbA1c dengan *NLR* serta *Platelet Lymphocyte Ratio* pada Penderita DM Tipe 2 Kelompok Prolanis. Penelitian ini termasuk penelitian observasional mempergunakan pendekatan *cross sectional*. Populasi penelitianya itu penderita DM tipe 2 yang terdaftar kelompok Prolanis dalam Faskes pertama wilayah Bangkalan berjumlah sampel 42 menggunakan teknik *purposive sampling*. Pemeriksaan HbA1c, NLR dan PLR dilakukan di Laboratorium Medis Farmalab Bangkalan. Analisis data mempergunakan uji korelasi *Spearman* diantara kadar HbA1c dan NLR didapatkan $p = 0,013$ $(p<0,005)$ bisa didefinisikan adanya korelasi antara kadar HbA1c dan NLR sedangkan nilai $r = 0,381$, bermakna korelasi positif berkekuatan korelasi tidak kuat. Hasil analisa hubungan antara kadar HbA1c serta PLR memperoleh hasil $p = 0,000$ $(p<0,005)$ serta mempunyai arti korelasi antara kadar HbA1c dan PLR serta nilai $r = 0,519$, membuktikan hubungan positif berkekuatan korelasi kuat. Sehingga diperoleh hasil adanya hubungan antara kadar HbA1c dengan NLR dan PLR pada penderita DM tipe 2 kelompok Prolanis.

Kata kunci : Diabetes mellitus tipe 2, Prolanis**,** HbA1c, NLR, PLR

ABSTRACT

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THE RELATIONSHIP OF HbA1C LEVELS WITH NEUTROPHIL LYMPHOCYTE RATIO, AND PLATELET LYMPHOCYTE RATIO IN PATIENTS WITH TYPE 2 DIABETES MELLITUS PROLANIS GROUP
1x + 73 pages + 14 Tables + 8 Pictures + 7 Appendices

Diabetes mellitus is still the 10th leading cause of death worldwide. HbA1c is an laboratorium test for determine the average glucose level over a 120-day period. NLR and PLR increase along with the severity of insulin resistance which is a marker of inflammation in the body. The purpose of this study was to analyze the relationship between HbA1c with Neutrophil Lymphocyte Ratio, and Platelet Lymphocyte Ratio in Patients with Type 2 Diabetes Mellitus Prolanis Group. This study is an observational study with a cross sectional approach. The population of this study were patients with type 2 diabetes mellitus who were registered with the Prolanis group in the first health facility in the Bangkalan area with a total sample of 42 with purposive sampling technique. HbA1c, NLR and PLR examinations were carried out at the FarmalabBangkalan Medical Laboratory. Data analysis using the Spearman correlation test between HbA1c and NLR obtained $p = 0.013$ ($p < 0.005$) that there is a relationship between HbA1c and NLR and the value of $r = 0.381$, meaning a positive correlation with weak correlation strength. The results of the analysis of the relationship between HbA1c and PLR obtained the result of $p = 0.000$ ($p < 0.005$) means that there is a relationship between HbA1c and PLR and value of $r = 0.519$, shows a positive correlation with a strong correlation strength. There is a relationship between HbA1c with NLR and PLR in patients with type 2 diabetes mellitus Prolanis group.

Keywords: Type 2 Diabetes Mellitus, Prolanis, HbA1c, NLR, PLR