ASSOCIATION BETWEEN DIABETIC RETINOPATHY AND THE NEUTROPHIL LYMPHOCYTE RATIO, PLATELET LYMPHOCYTE RATIO, MONOCYTE LYMPHOCYTE RATIO.

ABSTRACT

BACKGROUND:

Diabetic retinopathy is a serious complication of diabetes mellitus and it is considered as a major cause of blindness in working population. Its pathogenesis is complicated and it is related to many factors, but many groups have described the role of inflammatory markers in the development of diabetic retinopathy.

AIM:

The aim of my study is to evaluate the association between Diabetic retinopathy and the Neutrophil – Lymphocyte ratio, Monocyte – Lymphocyte Ratio and the Platelet – Lymphocyte Ratio.

METHODS:

It is a case control study involving 150 diabetic patients divided into three groups, 50 patients with diabetes without diabetic retinopathy, 50 patients with non proliferative

diabetic retinopathy, 50 with proliferative diabetic retinopathy

RESULTS:

By using Pearson correlation, age, blood pressure, fasting blood sugar, HbA1c, lipid profile, Total count , NLR, MLR, PLR showed a significant correlation with p value <0.05 at 95%CI. Thus by using both Anova and Pearson correlation there is a significant correlation between the NLR, MLR, PLR and diabetic retinopathy.

CONCLUSION:

In conclusion, the NLR, MLR, PLR ratios are significantly increased in the setting of diabetic retinopathy and they also correlate well with the severity of diabetic retinopathy these ratios can serve as remarkable markers while evaluating diabetes patients with or without retinopathy and they are of predictive and prognostic value.