THE STUDY OF NEUTROPHILS TO LYMPHOCYTE RATIO IN MODERATELY CONTROLLED DIABETES (HbA1C 7-9) AND ITS CORRELATION WITH MICROVASCULAR COMPLICATIONS

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ABSTRACT

AIMS AND OBJECTIVE:

The study of neutrophils to lymphocyte ratio in moderately controlled diabetes (hba1c 7-9) and its correlation with microvascular complications

- a) To measure neutrophil lymphocyte ratio in patients with moderately controlled type 2 diabetes mellitus.
- b) To determine the correlation between neutrophil lymphocyte ratio and microvascular complications in moderately controlled type 2 diabetes patients.

TYPE OF STUDY: -Prospective study, Cross sectional study

MATERIALS AND METHODS: Prospective study, cross sectional study, carried out on the patients with type 2 diabetes mellitus patients with hba1c levels 7 to 9, who are attending medicine opd and admitted under medicine. Complete blood count, fundoscopy, urine microalbumin and monofilament were analysed in these patients.

RESULTS:- This study shows that more than half (63%) of the study participants were males and 37% were females. Most of the patients came for follow up (81%). In our study it was observed that patient with microvascular complications like retinopathy, nephropathy and neuropathy had higher NLR when compared with patients with no microvascular complications.

CONCLUSION: Our study revealed that NLR was significantly raised in T2DM patients with microvascular complications. NLR being a simple, cost effective and easily available investigation can be used for screening tool to detect diabetic micro complications at an earliest especially in a resource constrained setup with limited laboratory facilities. Hence, NLR can be considered as a potential alternative for other

costlier inflammatory markers and also a prognostic biomarker of any microvascular complications among T2DM patients.

KEY WORDS: Type2 DM, NLR- Neutrophil-lymphocyte ratio, Microvascular complications.