

**Correlation of Neutrophil-Lymphocyte
ratio and Mean platelet volume to the severity
of coronary atherosclerosis**

Thesis

Submitted for partial fulfillment of master degree in internal medicine

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2020**

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Abstract

Keywords: atherosclerotic coronary artery disease (ASCAD) - neutrophil-lymphocyte ratio (NLR) – mean platelet volume (MPV)

Atherosclerotic coronary artery disease is the leading cause of coronary artery disease morbidity and mortality . Inflammation plays a major role in the process of Coronary atherosclerosis. Hematological markers like NLR and MPV correlate with the severity of ASCAD.

Aim of the work :This study aimed to show the correlation between NLR and MPV to the Severity of coronary atherosclerosis in patients undergoing coronary angiography.

Our study concluded that, among 100 patients undergoing coronary Angiography , There was correlation between both NLR and MPV and Gensini scores. The sensitivity of NLR marker in diagnosis of severe coronary atherosclerosis was (78.6%) and specificity was (77.6%) at cut-off level of (3.45) and for MPV marker was (69%) and specificity was 60.3%) at cutoff level of (10.75), with total accuracy of 85.8% for NLR versus 70.8% for MPV.

Conclusion:NLR and MPV had independent predictor roles for the severity of ASCAD. They are readily available, easy calculable and low priced

parameters, unlike other inflammatory markers. Both may be easily used in predicting the severity of CAD before coronary interventions.