**ASSESSING THE ROLE OF HOMOCYSTEIN IN NUMBER AND SEVERITY OF CORONARY ARTERY DISEASE (CAD), IN PATIENTS WITH AND WITHOUT MAJOR CORONARY RISK FACTORS THAT UNDERWENT ELECTIVE CORONARY ANGIOGRAPHY**

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Introduction: Preventive measures such as risk factor modification Play central Role in decreasing cardiovascular events. According to the studies one third of patients suffering from coronary artery disease have no identifiable risk factor. Therefore Novel risk factor recognition such as Homocystein highlighted especially in patient with less conventional cardiac risk factors.

Objective: The goal of our Study is to evaluate relation between Homocystein and the number and severity of coronary arteries involvement by Angiographic indices.

Methods and Materials: This Cross-Sectional study evaluated 270 patients suffering from CAD that underwent coronary angiography. Personal Data and variables gathered by questionnaire including. Then venous blood sample was taken for Homocystein level. The correlation between Homocystein and cardiac Risk factors separately evaluated. Followed by assessment of extension and severity of underlying CAD in relation to Homocystein Level.

Result & Conclusion: Among patients in this Study 62.9% were Hypertensive, 24.8% Diabetic , 5.6% with Positive Family history, and 69% had previous History of MI or complains of Typical angina. Homocystein Level was High in 45.2% and Low in 1.5% of patients .Based on Coronary Angiography Report: the prevalence of Single Vessel disease(1VD) was 17.7%, two Vessel Disease(2VD) 33.3% and three Vessel Disease(3VD) 47.7%. Comparing the above finding with Homocytein level shows Homocytein is not an independent Risk Factor for the evaluation of CAD (p-Value 0.16). But there is positive correlation between Number of Diseased Vessel in patient without conventional Risk Factors and Homocytein Level. (P-Value 0.003).