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ASSESSING THE ROLE OF HOMOCYSTEIN IN NUMBER AND SEVERITY OF CORONARY ARTERY INVOLVEMENT, IN PATIENTS WITH AND WITHOUT MAJOR CORONARY RISK FACTORS THAT UNDERWENT ELECTIVE CORONARY ANGIOGRAPHY

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Objectives Coronary artery disease is a major problem for the health and is the most common cause of Mortality and morbidity in the word. 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 Lp (a), homocystein, fibrinogen and properly modifying these factors highlighted, especially in patient with low conventional cardiac risk factors. Homocystein is a sulphohydril amino acid derived from dietary methionin metabolism, and its level correlate with higher Cardiovascular events, the main goal of our Study is to evaluate the role of homocystein as a risk factor of CAD and also assess the relation between plasma level of homocystein and the number and severity of coronary arteries involvement by angiographic indices.

Methods This is a Cross-Sectional study that evaluated 270 patients suffering from CAD that underwent invasive coronary angiography by expert cardiologist if clinically indicated. Personal Data and variables gathered by questionnaire including: Age, Sex, History of hypertension, Dyslipidemia, Smoking, prior MI, diabetes. Family history of premature CV event and past medical history of Kidney, Liver or thyroid disorders. Then venous blood sample was taken for homocystein level. The relation between homocystein and cardiac Risk factors separately evaluated followed by assessment of extension and severity of underlying CAD in relation to Homocystein Level.

Results This is a Cross-Sectional study that evaluated 270 patients suffering from CAD. that underwent invasive coronary angiography by expert cardiologist if clinically indicated. Personal Data and variables gathered by questionnaire including: Age, Sex, History of hypertension, Dyslipidemia, Smoking, prior MI, diabetes, Family history of premature CV event and past medical history of Kidney, Liver or thyroid disorders. Then venous blood sample was taken for homocystein level. The relation between homocystein and cardiac Risk factors separately evaluated. followed by assessment of extension and severity of underlying CAD in relation to Homocystein Level.

Conclusions Among patients underwent this Study 62.9% were Hypertensive, 24.8% Diabetic, 5.6% with Positive Family history, 49.6% suffer from Hyperlipidaemia, 69% had previous History of MI or complains of Typical angina pectoris. 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%.