

51<sup>st</sup> CARDIOCON 2022: ABSTRACT

**EXERCISE TOLERANCE TEST (ETT), AN EFFECTIVE TOOL FOR PREVELANCE AND ESTIMATION OF CORONARY HEART DISEASE**

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**Objectives:** Exercise tolerance test (ETT) is utilized for diagnostic and prognostic reasons in patients with chest pain and suspected coronary artery disease (CAD). The main objective is to know the nature of chest pain, either it is cardiac or non-cardiac. By using the exercise tolerance test tool we can evaluate the prevalence of ischemic heart disease (IHD) in patients with chest pain.

**Methodology:** This cross-sectional study was carried among 572 male and female patients 30 to 65 years of age with chest pain. Their exercise tolerance test was performed using Bruce protocol and then the ECG findings and cardiopulmonary responses were studied at the Tertiary Care Cardiac Centre of Karachi.

**Results:** From 572 profiles only 177 were found positive ETT. The prevalence of IHD was found to be 30.94 %. We studied all ETT-positive patients and found that IHD was most common in hypertensive patients, which was 33.89%. Dyslipidemia, diabetes, obesity, smoking habit, and positive family history were also found to be the leading factors of ischemic heart disease.

**Conclusion:** Our results conclude that there is a high incidence of heart disease in patients with hypertension, dyslipidemia, diabetes, positive family history of heart disease, obesity, and smoking. Our study establishes that if someone is coming with chest pain must be further evaluated, and the easy way is to perform the exercise tolerance test. Those with positive ETT should be treated properly and advised for regular follow-up by a cardiologist, control diet, regular exercise, no smoking, and a healthy lifestyle.

**Keywords:** Exercise tolerance test, Chest pain, Coronary heart disease, Ischemic heart disease, Angina pectoris, Treadmill test

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