CARDIOVASCULAR RISK ASSESMENT IN HIGH RISK INDIVIDUALS - A PROSPECTIVE STUDY CORRELATING hs-CRP, HRR WITH CORONARY ANGIOGRAM

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ABSTRACT
OBJECTIVE: The aim of present study is to correlate hsCRP levels & heart rate recovery in Stress ECG test with coronary angiogram & to assess the presence and extent of coronary artery disease in high cardiovascular risk individuals.

Design: Prospective Observational Study.

Setting: Department of Internal Medicine, Department of Cardiology, Govt. Stanley Medical College, Chennai 1.

METHODS: 70 patient with high risk cardiovascular individuals were enrolled from medicine opd, total cholesterol, BP, hs-CRP were obtained from them, QRISK cardiovascular risk was calculated and risk stratification done , further ECG stress test was done, from them with high DTS score (+4 to -7) coronary angiography was done with JENKINS scoring.

RESULTS: Mean hs – CRP in the population was found to be 2.1770 with higher prevalence of hs- CRP levels in age group > 55. Mean angiographic score was 11.76, higher angiographic score was prevalence in age group > 55. Smoking index doesn't correlate with hs - CRP levels in smokers p value p value 0.081, HRR doesn't have association with angiographic score p value (0.728), Prevalence of high cholesterol levels mean value 228.77, was high in study population when compared to standard indian population., Mean HDL levels 31.54 was lower in the study population when compared to the age , gender based indian population of same age group.

CONCLUSION:
hs – CRP levels doesn't correlate with severity of coronary artery lesions as assessed by Jenkins scoring , IMPAIRED HEART RATE RECOVERY (< 12/ min fall in H.R after exercise) was more prevalent in patients having low DUKE TREAD MILL SCORE, however there is no significant association between HEART RATE RECOVERY and severity of angiographic lesions.

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Key words: hs- CRP., HRRR, DTS, Angiography.