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Authors	Subramanian Kannan (1), Venkatraman Bhat (2), Shreya Kunder (1), Manoj Natarajan (3)
Title	Association of gamma-glutamyl transpeptidase and coronary risk markers in Indian population: A retrospective review of laboratory data from a tertiary referral center
Department	1. Department of Endocrinology, Diabetes and Bariatric Medicine, Narayana Health City, Bangalore, India 2. Department of Radiology, Narayana Health City, Bangalore, India 3. Department of Internal Medicine, Narayana Health City, Bangalore, India
Category	Miscellaneous
Abstract	Background: Gamma glutamyl transferase (GGT) has been traditionally associated with alcohol use and hepatobiliary disease. Recent evidence shows that GGT is associated with metabolic syndrome (MS) and is an indicator of cardiovascular morbidity and mortality. Data from Indian population is sparse. Aim: We aim to study the association between serum GGT levels, plasma glucose levels, lipid profile and coronary calcium scoring. Methods: We reviewed the laboratory records of 236 patients (age > 18 years) who underwent coronary CT angiogram from July 2013 to May 2014. Patients with cholestatic pattern of liver function tests were excluded (n=0). Coronary calcium scores (CCS) were stratified as normal (CCS=0), and abnormal [mild (CCS=1-99), moderate (CCS=100-399) and severe (CCS>400)]. Results: The mean (SD) age of the patients was 51 (9.6) years with 68% males. The mean GGT levels was 49.6 (51) IU/L (median (IQR) 37 (28-52) IU/L; range 11-497). There was a linear correlation between GGT levels and fasting glucose levels in men (r=0.24; P=0.002) and a trend with post-prandial glucose levels in women (r=0.20; P=0.074). Similarly a linear correlation was seen between GGT and LDL cholesterol (P=0.027) and non-HDL cholesterol (P=0.0034). The mean CCS for the entire cohort was 48 (162) (median 0 (0-16); range of 0-1579). CCS was normal in 66%, mild in 24%, moderate in 7% and severe in 3% of patients. The mean/median GGT levels were higher in patients with abnormal CCS (mean: 52+59; median 39 (28-55) compared those with normal CCS (mean: 48+49; median 36 (29-52), however this was not statistically significant (P=0.73). Conclusion: GGT levels was associated with a higher glucose level and an atherogenic lipid profile. Although patients with abnormal CCS had a higher GGT, this was not statistically significant.
Conflicts	
Email	subramanian.kannan@gmail.com
Decision of Scientific committee	

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State if accepted for oral	