Biochemical profile in type 2 diabetic patients presenting with acute chest pain - A cross sectional study

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Coronary artery disease is a known outcome of long standing diabetes mellitus and has been attributed to associated dyslipidemia in the patients. Ascertaining the preventable and amendable CAD risk factors at the earliest is of utmost priority to minimise mortality.

A cross sectional study was conducted on 59 consecutive Type 2 diabetes patients on oral hypoglycemic medication, referred to a tertiary care hospital for chest pain. Based on the cardiac outcome the patients were divided in two groups; Group-I (Unstable angina) and Group-II (Myocardial infraction). The mean age, blood pressure, duration of diabetes was recorded. HbA1C, Fasting blood sugar (FBS), Total cholesterol (TC), Triglycerides (TG), HDL, LDL and VLDL were estimated. TC/HDL and non HDL-C were calculated.

The mean age of the study population was 53.4 ± 4.9 years. The groups were comparable with regards to male: female (17:12 vs 20:10); hypertensives: non-hypertensives (14:15 vs 12:18); smokers: non-smokers (1:28 vs 6:24); alcohol consumers: non-consumers (5:24 vs 8:22). Duration of diabetes was longer in Group I and the sole significant (p=0.01) variation between the groups. The mean FBS, HbA1c and LDL values were higher than the upper reference limit in both the groups. All the other biochemical parameters were found to be comparable in both groups of diabetic patients admitted with acute chest pain irrespective of the outcome. This indicates the poor reliability of these factors in the prediction of the severity of CAD.

Biography

Anupama Hegde has completed her MD in Biochemistry from Kasturba Medical College, Mangalore Manipal University and is a faculty in the Biochemistry Department of this reputed institution ever since. She is actively involved in teaching undergraduate and postgraduate courses in the institution. She is also in-charge of the clinical Biochemistry laboratory attached to the KMC Hospital. She has more than two dozen publications in reputed journals. Her field of interest and research are obesity, hypothyroidism and life style related diseases. She is a guide and a co-guide to MD and PhD scholars pursuing their research in these areas.

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