51st CARDIOCON 2022: ABSTRACT

CORONARY ARTERY DISEASE IN YOUNG PAKISTANIS: RISK FACTORS AND PATTERN OF DISEASE

Muzaffer Ali[1]
[1]Punjab Institute of Cardiology (PIC), Lahore, Pakistan

Objectives: To determine the distribution of risk factors and pattern of coronary artery disease among young Pakistanis presenting with acute coronary artery syndrome. A cross sectional study conducted from August 2018 to October 2019 at Department of Cardiology Jinnah Hospital Lahore.

Methodology: Total of 150 young patients up to 40 years of age with acute coronary syndrome (ACS) was included in this study. Risk factors were evaluated on patient's current medication history for diabetes mellitus, hypertension, lipid lowering drugs and recent reports HbA1c, total body lipids. Data was entered and analyzed in SPSS version 21.0. Socio-demographic, clinical profile and risk factors were evaluated and presented as frequency and percentages. Cross tabulation was for ACS and risk factors. Statistical significance was assessed using Chi-square test with significant value of $p < 0.05$.

Results: Among 150 subjects mean age was $34.20 + 4.246$ with minimum age of 23 years and maximum age of 39 years. 92.0 % were male and 56.0% were having acute anterior wall STEMI, 36.0% had acute inferior Wall STEMI, 2.0% suffered from acute lateral wall STEMI, 2.7% had acute inferoposterior wall STEMI and 3.3% had NSTE-ACS. Risk factor analysis shows that 22.0% had diabetes mellitus, 20.7% had hypertension, 33.7% had a positive history of IHD in family, 71.3% were smokers, 44.0% had obesity, 66.0% had reduced HDL and 44.0 % had elevated LDL levels. Regarding pattern of coronary artery disease, 70.7% patients were having one vessel CAD, 28.0% two vessels CAD and 1.3% had three vessels CAD.

Conclusion: Mean age of acute coronary syndrome is low amongst young Pakistani population with male predominance and acute anterior and inferior wall STEMI being most frequent diagnosis. Smoking, dyslipidemia particularly low HDL, positive family history of ischemic heart disease, hypertension, diabetes mellitus, obesity, was identified as important risk factors. Most of the patients had one vessel CAD.

Keywords: Acute Coronary Syndrome, Young Adults, Hypertension, Smoking

Corresponding Author: Muzaffer Ali, Punjab Institute of Cardiology (PIC), Lahore, Pakistan.