

ABSTRACT

This is a retrospective cross-sectional study with both descriptive and analytic components. It was conducted to determine the predictive strength of classical risk factors of coronary artery disease in Pakistan.

The data were collected from patients attending the Punjab Institute of Cardiology, Lahore for their first diagnostic coronary angiography using a patient's data form. The study covered the period from Feb.- Aug. 2001. All variables were coded, and data were entered and analyzed by us using a personal computer.

The data for 506 patients on known classical risk factors of coronary artery disease (CAD) were collected, which were presented first time for coronary angiography. The patient population was consisted of 308 male patients and 198 female patients.

The results showed that the mean age of patients under study was 50.86 years with a standard deviation of 9.58 years and almost same results were for male and female patients separately. Diabetes Mellitus was found the most major risk factor of CAD event in premenopausal it was the only significant risk factor with an odds ratio of 13.621 for diabetic patient as compared to non-diabetic patient. The second major risk factor was come out Hyperlipidemia both in males and females with an odds ratio of ranging from 2 to 2.25. The Smoking was found significant in male patients only. Obesity and Age were also found to be significant, though the association of Obesity was not found so strong as Diabetes Mellitus and Hyperlipidemia.

Logistic regression method was used to get a predictive model and estimate the odds ratio. Chi-square, p-value and Phi/ Cramer's V-value were used parallel to the logistic regression for bivariate analysis. Ninety five percent confidence limits were computed for the risk factors to test the hypothesis whether the risk factors were independent of CAD or not.

The study highlighted the problems of improper reliance on coronary angiography, the definite source for the diagnosis of CAD. A consultant with a better knowledge of association of classical risk factors with CAD in Pakistan can be a great help for the patients. As coronary angiography, though little, but have definite risks involved.