A STUDY ON LIPOPROTEIN(a) LEVELS IN YOUNG CORONARY ARTERY DISEASE PATIENTS AND THEIR FIRST DEGREE RELATIVES

ABSTRACT:

AIM OF THE STUDY:
To determine Lipoprotein(a) levels in young coronary artery disease patients and in their first degree relatives and correlate with the severity of Coronary Heart Disease

METHODS:
This is a case control study involving three groups  Group A – angiographically proven young coronary artery disease patients (both males and females) aged <45 years, Group B- First degree relatives of group A (siblings and children) and Group C - Age and sex matched healthy controls. Lipid profile and fasting plasma glucose were estimated using spectrophotometry. Lipoprotein (a) was estimated using immunoturbidimetry.

RESULTS:
We observed high lipoprotein(a) concentration in young CAD patients and there was associated elevation in their first degree relatives. We also observed a lower cut off value for lipoprotein(a) in our population. Lipoprotein (a) concentration correlated with the severity of block in coronary angiogram.

CONCLUSION:
The study shows a strong genetic predisposition , thus the Lp(a) screening for the first degree relatives of patients with premature CAD has to be encouraged. Hence primary prevention of CHD can be achieved by providing cost effective measures before the disease is being well established.

KEYWORDS: Coronary Artery Disease, Lipoprotein(a)