▼ FACULTY ABSTRACTS

F - 23 : A COMPARATIVE STUDY OF LIPID PROFILE AND CARDIOVASCULAR RISK BIOMARKERS AMONG CHRONIC HAEMODIALYSIS PATIENTS AND HEALTHY INDIVIDUALS.

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Introduction: Lipid abnormalities and increase in inflammatory markers are common among patients with End Stage Renal Disease (ESRD) and it tends to persist/worsen even after initiating Intermittent Haemodialysis (IHD). The cardiovascular mortality and morbidity remains significantly high in this population. **Aim**: The present study was carried out to assess the pattern of lipid abnormality in our population and to find its association with inflammatory markers.

Materials and methods: It was a cross-sectional, observational study on ESRD patients undergoing Haemodialysis (HD) in comparison with age and sex matched healthy individuals in a tertiary care hospital. About 40 adult male and female patients aged >18 years, undergoing chronic HD for more than 6 months were enrolled in Group A. Patients who were alcoholics, tobacco consumers and those on steroids and hypolipidemic drugs were excluded. Group B consisted of healthy, age and sex matched controls. Serum lipid profile, lipoprotein A, apolipoprotein A1, apolipoprotein B and apo B/A1 ratio, serum uric acid, homocysteine, hs-CRP and testosterone levels were estimated among patients undergoing intermittent HD and healthy individuals. Chi-square/Fisher's-exact test was used for comparing ratios. A p-value of <0.05 was considered statistically significant.

Results: The mean Total Cholesterol (TC), Low Density Lipoprotein (LDL) and Non-HDL High Density Lipoprotein cholesterol was significantly lower in HD patients as compared to control group with all the three parameters attaining statistical significance (p<0.005). The mean lipoprotein A level was significantly higher (p=0.037), while Apo A1 was found to be significantly lower (p=0.001) in patients receiving HD. Inflammatory markers like uric acid was high (p<0.005) and serum testotsterone level in male HD patient was significantly low (p<0.005).

Conclusion: The mean values of traditional serum lipid profile remained lower in HD patients than the control group. The abnormalities in lipoprotein A and apolipoproteins were more pronounced in patients undergoing HD. The mean level of testosterone also was found to be lower in male patients receiving HD. Hence, estimation of lipoprotein A, apolipoproteins and inflammatory markers may serve as a potential tool in cardiovascular risk stratification.

Keywords: High density lipoprotein; High sensitivity C-reactive protein; Inflammatory markers