Lipoprotein PatternWithChronicHeamodialysis

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The aim of the present work is to estimate the serum concentration of lipoprotein pattern (HDL - LDL - VLDL) and serum cholesterol, triglyceride, apolipoprotein (B) in patients with chronic renal failure on regular haemodialysis and also to clarify the role of the detected abnormalities as a cardiovascylar risk factor in such patients. The study was conducted on ten adult male partients with chronic renal failure on regular haemodialysis as well as ten normal healthy control subjects, with matchingage and sex. All patients were subjected to complete clinical and laboratory investigations to diagnose renal failure and exclude other diseases that alter lipid metabolism.Patients with chronic renal failure receiving haemodialysis regularly, twice weekly for about 6 months age. Selected from renal dialysis unit of Benha university hospital. All patients and controls were subjected to the following : 1. Estimation of urea and creatinine in serum.2.Estimation of serum triglycerides and total cholestrol.3. Estimation of serum levels of HDL-c, LDL-c and VLDL-c.4. Estimation of serum concentrations of apo lipoprotein B.According to the findings :-Serum levels of urea and creatinine were significantly decreased on regular haemodialysis, so haemodialysis can ameliorate the high levels of blood urea and oreatinine.-The total serum cholesterol in patients on regular haemodialysis shows normal levels as the normal control subjects.-The serum levels of triglyceride showed significantly increase than normal control and may result from decreased VLDL clearance, increased synthesis in some cases could be reported and decreared hepatic lipase and lipoprotein lipase could contribute to the decreased VLDL clearance.-There was a significant decrease in HDL-c in cases of haemodialysis compared with reference group.-Serum level of LDL-c was high in the 1st sitting than the last sitting dialysis which become in the range of normal levels.-Serum level of VLDL-c show significant increase in patients with regular dialysis than normal control inspite of the decrease of serum levels in last sitting than the first one.-Serum apoliprotein (B) was increased in the dialysed patient than normal control.-We concluded that these abnormalities in lipoprotein composition may be the primary phenomena responsible for increasing risk for cardiovascular atheromatous disease in regular haemodialysis patients. Haemodialysis does not appear to modify lipoproteinabnormalities observed in patients with chronic renal failure undergoing maintenance haemodialysis.