

SUMMARY

This study included 21 healthy subjects (controls) and 40 subjects who are described as risky persons for coronary heart diseases. They were 10 hypertensives, 10 smokers, 10 diabetics, and 10 obese. Beside the thorough clinical examination including E.C.G., the following investigations were performed for both the healthy controls and the risky subjects :-

- 1) Plasma glucose levels both during fasting and two-hours after ingesting 75 g. glucose oral load.
- 2) Serum triglycerides level.
- 3) Serum levels of total cholesterol, LDL and HDL-cholesterol.
- 4) Serum levels of apolipoprotein A and Apolipoprotein B.

The results of this study showed :

- 1) In hypertensive patients significant hypertriglyceridaemia and increased total cholesterol and LDL-cholesterol have been demonstrated. HDL-cholesterol, apo A and Apo B levels were not significantly affected.
- 2) In smokers, significant hypertriglyceridaemia, elevated serum concentration of total cholesterol, LDL-cholesterol, and apolipoprotein B, with significant decrease in HDL-cholesterol have been demonstrated.

- 3) In diabetics, significant elevation in serum levels of triglycerides, total cholesterol, LDL-cholesterol and apolipoprotein B, in addition to significant lowering of serum levels of apolipoprotein A and HDL-cholesterol have occurred.
- 4) In obese subjects, the same lipid abnormalities detected in diabetics were noted in obese subjects, the difference among the two groups was in the extent of the abnormalities among the different lipid parameters.

Thus lipid abnormalities are present among these four groups of risky population for coronary heart disease. Estimation of serum levels of apolipoprotein A or B did not add more than estimating lipid and lipoproteins for detecting these lipid abnormalities among this type of risky population.