INTRODUCTION AND AIM OF THE WORK

Epidemiological studies have provided extensive evidence that the premature development of atherosclerosis and ischaemic heart disease is associated with elevated total serum cholesterol level (a reflection of increased LDL cholesterol) and decreased concentration of HDL cholesterol (Levy, 1983).

It is now apparent that the distribution of cholesterol in plasma is a complex function of both the relative and absolute concentrations of a variety of apolipoproteins. Thus, elevated levels of LDL cholesterol are generally accompanied by increases in the serum concentration of apo B, a major component of VLDL and LDL, while increased HDL cholesterol levels are reflected in higher serum concentrations of apo A-I, the major protein component of HDL (Goldstein and Brown, 1977).

An increased plasma lipid concentration is an important risk factor for the development of coronary artery disease. Recently it has been shown that plasma apolipoprotein concentrations are an even better indicator of risk than plasma lipids (Whayne et al., 1981).

So, the aim of this work is to study the pattern of serum apolipoproteins and serum lipoproteins in those patients with high risk factors for coronary heart disease and to compare this pattern with persons without these risk factors. This may aid us in more understanding of the high incidence of coronary heart disease in these patients.