A-04: Study on some biochemical parameters in hypertensive individuals

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Conventional antihypertensive treatment is claimed by some to have an unfavourable effect on coronary risk factors other than hypertension. The serum lipid concentrations in Sri Lankan hypertensives are not well documented. Hence this study was undertaken in subjects on antihypertensive medication but without an attempt to group the individuals according to the type of drugs used.

Biochemical parameters such as total cholesterol (TC), HDL-cholesterol (HDL-C), LDL-cholesterol (LDL-C), triacylglycerol (TAG), total protein, albumin, calcium, ionic calcium and uric acid in serum in 19 hypertensive individuals were compared with a control group of 19 individuals matched for age and sex. The mean diastolic pressure among hypertensive and control individuals were 93.7 ± 7.6 and 80.3 ± 6.4 mm Hg respectively.

Significant differences were observed in TC (266±63 mg/dl in hypertensives and 218 ± 32 mg/dl in control), LDL-cholesterol (184 ± 55 mg/dl in hypertensives and 143 ± 26 mg/dl in control), TAG (159 ± 101 mg/dl in hypertensives and 96 ± 24 mg/dl in control) and uric acid (6.0 ± 1.4 in hypertensives and 4.7 ± 1.2 mg/dl) concentrations of hypertensive individuals compared to the controls; these values were higher in the hypertensive individuals. Others, except serum albumin, were also higher in hypertensives. However, the differences were statistically not significant.

Thus the concentrations of the coronary risk factors such as TC and LDL-C were higher in the hypertensive individuals. Hence, it is advisable to assess the lipid status of individuals on antihypertensive medication.