Clinical evaluation of lipids, lipoproteins and red blood cells sodium and potassium in patients with different grades of hypertension

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Abstract :

Objectives: To show that lipid and lipoprotein levels and cell sodium and potassium content and transport could change depending on the degree of hypertension.

Design and methods: Forty-three hypertensive patients and 20 healthy subjects were recruited at the Cardiology and Biochemistry Departments of Tlemcen University Hospital Centre (Northwest of Algeria).

Results: Levels of CHOL,TG, PL, HDL-TG, LDLc, LDL-TG, LDL-PL, HDL2-TG and HDL3-TG were significantly higher in hypertensive patients than those in controls. HDL-PL levels were significantly lower in patients compared with controls and decreased according to the grade of hypertension. HDL2c, HDL2-PL and HDL3-TG and cell content and fluxes of sodium and potassium change gradually with higher grades of hypertension.

Conclusions: Hypertensive patients with circulating lipid alterations are associated to ion cell content and transport abnormalities, which were worsened progressively with higher grade of hypertension.

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