BIOCHEMICAL MARKERS AND LIPID PROFILES IN A MULTIETHNIC HYPERTENSIVE POPULATION FROM THE UNITED ARAB EMIRATES.

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Hypertension is a major cause of morbidity and mortality in the United Arab Emirates (UAE). Little is known about vasoactive substances, lipids and lipoproteins among hypertensives.

We evaluated plasma endothelin-1 (ET-1), nitric oxide (NO), and lipid parameters among hypertensives and controls in a heterogeneous ethnic population from the UAE.

Venous samples were collected from 164 hypertensives and 112 normotensives matched for age, gender and ethnicity to determine plasma levels of ET-1, NO, lipids and lipoproteins by ELISA and other conventional methods.

In line with previous findings, ET-1 and NO were significantly ($p< 0.001$) higher among hypertensives as compared to controls. Levels of very low-density lipoprotein (VLDL) and triglycerides (TG) were significantly ($p < 0.01$) higher in hypertensives. Total cholesterol (TC) ($p < 0.01$), and low-density lipoprotein cholesterol (LDL-C) ($p < 0.001$), were significantly lower among hypertensives.

In this heterogeneous ethnic population, ET-1 and NO, may be associated with hypertension. Abnormal TG, VLDL, and unaltered TC levels may indicate the presence of type IV hypertriglyceridaemia. High ET-1, NO, TG and VLDL may constitute significant risk for cardiovascular complications.