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ASSESSMENT OF SOME ATHEROSCLEROSIS RISK FACTORS IN APPARENTLY HEALTHY SUBJECTS FROM TWO AZOREAN POPULATIONS

[R Ferin](#), M Lima, ML Pavão

CIRN, Universidade Dos Açores, Ponta Delgada, Azores

Objectives: In Azores, the death rate from coronary artery disease (CAD) is about twice than in mainland Portugal. The aim of this study was to assess some major risk factors of atherosclerosis-AT (serum lipid profile and apoB and apoA-1 levels) in subjects from two populations in S. Miguel Island. Hypertension and obesity were also considered.

Methods: The study group was formed by 147 apparently healthy subjects with no chronic diseases, aged 20 to 60 years, born living, respectively, in the villages of Nordeste –ND (53 men and 39 women) and Povoação-PV (22 men and 51 women). Clinical information and life habits were also registered.

Results: In both groups about 62% of subjects were hyperlipidemic and 30% obese. Hypertension was observed in about 36% in PV and 43% in the ND group. Both apoB levels and apoB/apoA-1 ratio were significantly higher in ND than in the PV subjects, namely in men (31% and 19%, respectively). Also apoA-1 levels in men were 9% higher in ND than in PV. In the ND group, sex-related differences were found in apoB levels and apoB/apoA-1 ratio, being higher in men. In the PV group, apoA-1 levels were significantly lower (15%) in men than in women.

Conclusion: Although apparently healthy, most subjects from the two studied populations were hyperlipidemic, mainly due to hypercholesterolemia (TC and LDL-C). However, HDL-C was at high levels (60 mg/dL) in both groups. The coexistence of dyslipidemia, hypertension and obesity (26% of cases in ND and 17% in PV group) can aggravate the risk of developing AT (and CAD), which is higher in ND than in PV, mainly in men. ApoB/apoA-1 ratio revealed to be a simpler index of atherogenic risk than the classic serum lipid profile.

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