Polyvascular atherosclerotic disease and multiple risk factors: focus on arterial hypertension

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INTRODUCTION: The goal of this study is to evaluate the role of arterial hypertension (HTA) in patients (pts) with atherosclerotic disease (AthD) of coronary arteries (CAD), carotid arteries (CdA) and iliaco-femoro-popliteal (IFP) arteries.¹⁻³

PATIENTS AND METHODS: The study included a total of 311 pts with clear clinical AthD. We evaluated the presence of CAD, CdA, and IFP as well as clinical variables: age, gender, arterial hypertension (HTA), tobacco, hyperlipidemia (HLP), obesity (BMI), fibrinogen and diabetes mellitus. The risk factors score was calculated as $x/8$. Special focus was given to pts with HTA (n=183) who were divided in two subgroups; isolated systolic HTA and systolic/diastolic HTA.

RESULTS: The study included a total of 311 pts, 207 males and 104 females, average age of 64 ± 11.2 years. Combination of IFP + CAD was registered in 124 pts, with multiple risk factors (MRF) score 4.35, IFP+CdA was registered in 78 pts, with MRF score 4.51, and IFP+CAD+CdA in 109 pts, with MRF score 4.59. HTA was present in 132 pts (42.4%, $p < 0.01$), 86 males and 48 females, with the average age 67.8 ± 12.9 . Isolated systolic HTA was registered in 84 pts (63.6%), and systolic/diastolic HTA in 48 pts (36.4%). There was a significant relation between the IFP+CAD pts and isolated systolic HTA, $r = .81$, $p < 0.001$ and borderline significant relation between IFP+CAD+CdA pts and systolic/diastolic HTA, $r = .42$, $p = 0.07$.

CONCLUSIONS: (1) We found a clear link between the PolyAthD and elevated MRF score ($r = .64$, $p < 0.01$), especially clinical variables HTA ($p < 0.01$) and tobacco ($p < 0.01$). (2) We established a borderline relation rank between dual disease (IFP+CAD and IFP+CdA) and MRF score ($r = .46$, $p < 0.05$). (3) There was a statistically significant relation between IFP+CAD patients and isolated systolic HTA, $r = .81$, $p < 0.001$, and a non-significant relation between IFP+CAD and IFP+CAD+CdA disease and systolic/diastolic HTA, $r = .36$, $p = 0.9$.

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LITERATURE

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