

## **RISK FACTORS FOR ARTERIOSCLEROSIS AND THEIR EFFECT IN CAROTID ARTERY STENOSIS**

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**AIM:** To determine risk factors for arteriosclerosis in patients with stenosis of the extracranial segments of carotid arteries according to the occurrence and degree of carotid artery stenosis (CAS).

**METHODOLOGY:** Study group consisted of 373 patients treated at the Service of Neurology, in UHC "Mother Teresa", Tirana, during 2007-2010 in whom CAS was verified by continuous wave Doppler .

Control group included 150 patients matched by age (65,6 ±9,7 vs. 62,4±8,9years) and sex (68,5%vs.66,3%) without CAS. Data on age, sex, hypertension, cigarette smoking, alcoholism, diabetes, cholesterol, triglycerides, fibrinogen and uric acid were analyzed. CAS was classified into four degrees. Mild CAS (<50%); Moderate CAS (50%-70%) and severe CAS (70%-99%)

**RESULTS:**

- Mild CAS was founded in 23,9%, moderate CAS in 17,9% and severe CAS 20,9% of patients ; while 37% had various forms of occlusion of one or more carotid arteries.
- Normal brain CT was recorded in 12,3%.
- Normal neurologic finding in 1,36%.
- Transient neurologic deficit in 27,4% of patients .
- CAS patients had a higher prevalence of arterial hypertension (62%vs. 26%), diabetes (42,5%vs. 18%), hypercholesterolemia (82,8%vs. 52,2%), hypertriglyceridemia (55,3%vs. 32,6%) and hyperfibrinogenemia (85,2%vs 12,9%) than those without CAS ( $p < 0,001$  all)..
- The prevalence of other risk factors (cigarette smoking, alcoholism and hyperuricemia) was homogeneously distributed in the two patient groups.
- Hypercholesterolemia and hypertriglyceridemia were additionally classified into moderate and severe forms.

**CONCLUSIONS:** The number of risk factors strongly correlated with the degree of CAS, however, the correlation with other risk factors was negligible. Some of the known risk factors for the development of arteriosclerosis (arterial hypertension, hypercholesterolemia, hypertriglyceridemia and hyperfibrinogenemia) were more frequently present in CAS patients. In these patients, there was a significant correlation between the number of risk factors and CAS degree.