

## **CAROTID ATHEROSCLEROSIS IN PATIENTS WITH CEREBROVASCULAR DISEASE IN THE SETTING OF DIABETES MELLITUS AND OBESITY**

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**Background.** Diabetes mellitus (DM) and obesity both are risk factors for atherosclerosis (AS) and stroke. **Aim.** To evaluate the prevalence and degree of extracranial AS in patients with ischemic cerebrovascular disease (CVD) in the setting of DM and obesity without DM. **Materials and methods.** The study comprised 108 patients with CVD: Group I – 54 patients with DM (65±8 years, 40,7% male), Group II - 54 non-diabetic obese patients (62±6 years, 37% male), p=0,6. All patients underwent clinical and neurological assessment, laboratory tests, brain MRI, ultrasound sonography. **Results.** All patients in both groups had CVD with arterial hypertension. Smoking was observed in Groups I and II (16% and 18% respectively), p = 0,8320. Body-mass index and LDL-cholesterol levels were higher in Group II 36,5±7,2 kg/m<sup>2</sup> vs 30,2 ± 4,6 kg/m<sup>2</sup> in Group I (p=0,001) and 3,2±0,7 mmol/l vs 2,34±1,17 mmol/l, respectively (p=0,02). No significant differences in triglyceride and HDL levels were noted. In patients with DM HbA1c was 7,3 ± 0,8%. 54 patients (100%) in Group I had extracranial AS, with 60% stenosis more prevalent (37%). Patients with obesity (Group II) had less prevalent AS – 68%, p=0,0002. Stenosis greater than 60% was observed less often, in 16,6% of cases, p=0,00185. AS prevalence with 2 or more arteries involvement was higher in patients with DM, p = 0,0002. **Conclusion.** The study has demonstrated a pronounced negative effect of diabetes mellitus (as compared to non-diabetic obese) on cerebral atherosclerosis progression in patients with ischemic CVD.

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