



### About the journal

Editorial policy

Instructions for authors

Cobiss

All issues

2021 OnLine-First

Issue 00

2021

2020

2019



Vojnosanitetski pregled 2021 OnLine-First Issue 00, Pages: 82-82

<https://doi.org/10.2298/VSP200502082J>

[Full text](#) (PDF 698 KB)

### Degree of cognitive impairment in patients with carotid stenosis in relation to cerebral ischemic lesions

Joveva Elena

Đorđević Gordana

Milošević Vuk

Arsovska Anita

Živković Miroslava

**Background/Aim.** The presence of carotid stenosis is a risk factor for cognitive impairment. The aim of our study was to evaluate the degree of cognitive impairment in patients with asymptomatic and symptomatic carotid stenosis and correlate it with the presence, location, and extent of cerebral ischemic lesions. **Material and methods.** A prospective analysis of 180 patients aged 50-70 years, divided into three groups (asymptomatic, symptomatic carotid stenosis and controls), was made. We assessed demographic characteristics, vascular risk factors, ultrasound examination of the carotid arteries, computerized tomography (CT), magnetic resonance imaging (MRI) of the brain, and neuropsychological testing. **Results.** The brain CT findings at admission showed ischemic lesions in the left hemisphere in 13.3% patients of the asymptomatic and 41% in the symptomatic group. In the right hemisphere, lesions were registered in 10% of the asymptomatic and 46.7% of the symptomatic patients. The difference between groups was statistically significant. The lesion volumes measured on CT and MRI scans were significantly different ( $p < 0.001$ ) between groups with asymptomatic and symptomatic carotid stenosis. The degree of cognitive impairment measured by the ACE-R test was significantly different between groups ( $p < 0.05$ ) with the most severe deficit in the symptomatic group. **Conclusion.** Our study has shown that cognitive impairment was more severe in patients with symptomatic carotid stenosis, compared to the patients with asymptomatic carotid stenosis.

**Keywords:** asymptomatic carotid stenosis, symptomatic carotid stenosis, cognitive impairment, cerebral ischemic lesions