

CAROTID ARTERY STENOSIS AS A RISK FACTOR FOR THE OCCURRENCE OF ISCHEMIC STROKE

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Carotid artery stenosis is a widespread disease and it is one of the most significant risk factors for the development of ischemic stroke. The risk of ischemic stroke increases with the increase in the degree of carotid artery stenosis. Although the relation between carotid artery stenosis and other risk factors (arterial hypertension, hyperlipidemia, diabetes, etc.) has not been precisely determined in relation to the development, course and outcome of the ischemic stroke, the degree of this association is considered important for the development of ischemic stroke.

The aim of the study was to determine the significance of carotid artery stenosis in patients with ischemic stroke and to estimate the degree of association between carotid artery stenosis and other risk factors in the development of ischemic stroke.

The study included patients with ischemic stroke treated at the Cerebrovascular Diseases Department of the Neurology Clinic. The data were obtained from histories and from color Doppler (CD) examination of extracranial blood vessels of the neck.

The highest percentage of patients with stroke had carotid artery stenosis ($p < 0.05$). Of these patients, the highest percentage were with stenosis degree less than 60% ($p < 0.05$). The patients with more than two risk factors, in addition to stenosis, more often had ischemic stroke ($p < 0.05$). In the group without carotid artery stenosis, patients with large number of risk factors also had a higher risk of developing the disease, compared to those who did not have the combined risk factors ($p < 0.05$). However, patients with ischemic stroke without carotid artery stenosis who had several other risk factors also had the same risk of developing ischemic stroke as the patients with carotid artery stenosis without combined risk factors.

Carotid artery stenosis is a risk factor in ischemic stroke. In patients with several risk factors, stenosis is a high risk factor for ischemic stroke. Patients without stenosis but with several other risk factors have the same risk of developing ischemic stroke as patients with stenosis and without other risk factors. *Acta Medica Medianae 2016;55(2):40-45.*

Key words: carotid artery stenosis, ischemic stroke, risk factors