PREVALENCE OF SLEEP APNEA IN PATIENTS WITH CAROTID ARTERY STENOSIS.

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Introduction

Sleep apnea syndrome (SAS) is a common disease concerning about 13% of men and 6% of women and possible risk factor of cardiovascular diseases. The aim of the study was to estimate frequency of SAS among patients with severe carotid stenosis (CAS).

Materials and methods

Patients with CAS, qualified for surgical treatment, were enrolled for the study. Polygraphy was performed in all patients the night before surgery.

Results

55 patients were enrolled for the study (24 women, 31 men, mean age was 70±7,47, mean BMI 28,25±6,27 kg/m2). 36 patients underwent surgical endarterectomy, 19 patients carotid artery stenting. Sleep apnea was diagnosed in 44 cases (80% of subjects). Mean apnea- hypopnea index (AHI) was 14,88±12,88. SAS severity distribution: 22 mild, 14 moderate, 6 severe cases.

Conclusion

Sleep apnea is highly prevalent in patients with carotid artery stenosis scheduled for carotid surgery. SAS is more frequent in patients with symptomatic CAS undergoing surgery than in general population.

Discussion

SAS is responsible for systemic inflammatory response and oxidative stress and results in endothelial injury being a risk factor for atherosclerosis. The minimal nocturnal saturation influence carotid plaque score and cardiovascular disease risk. Our study proved that sleep apnea occurs more frequent in population with carotid artery stenosis than in general population. The direct mechanism of sleep apnea on vascular wall damage has not been fully understood. SAS is not routinely diagnosed among patients with advanced atherosclerosis. Presented result might be an argument for performing polysomnography in patients with CAS.