

BLOOD PRESSURE VALUES, BODY MASS INDEX AND INTIMA-MEDIA THICKNESS IN PATIENTS WITH MODERATE AND SEVERE OBSTRUCTIVE SLEEP APNEA

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OBJECTIVE: In cases of newly detected obstructive sleep apnea (OSA) the presence of coexisting cardiovascular risk factors, should be estimated. The aim of this study was to analyze the relationship between severity of OSA and body mass index (BMI), systolic and diastolic blood pressure (SBP, DBP), carotid intima-media thickness (cIMT) in examined population. **MATERIAL AND METHODS:** We examined 30 males (15 with moderate OSA – group A, and 15 with severe OSA - group B), aged 30-70 yrs. and 20 healthy individuals without OSA (group C). We evaluated BMI, SBP, DBP, cIMT (by B mode ultrasonography). **RESULTS:** We revealed significantly important difference in cIMT between group B and C (B: cIMT was $0,09 \pm 0,003$ cm in right common carotid artery [RCCA] and $0,01 \pm 0,004$ cm in left CCA [LCCA], C: RCCA $0,06 \pm 0,001$ cm, LCCA $0,06 \pm 0,002$ cm, $p < 0,05$). We observed that patients with OSA had greater BMI (A: BMI 30.7 ± 2.5 kg/m² vs 27.0 ± 3.5 kg/m², B: BMI 32.2 ± 5.5 kg/m² vs 27.0 ± 3.5 kg/m², $p < 0.05$), but there was no difference in BMI between group B and C. We found statistically significant difference in mean SBP and mean DBP between group A and B (SBP: 126.0 ± 15.8 mmHg vs 149.0 ± 15.2 mmHg, DBP 75.3 ± 9.9 mmHg vs 83.3 ± 9.7 mmHg, $p < 0,05$). **CONCLUSIONS:** 1. Patients with severe OSA had statistically significant higher SBP and DBP than patients with moderate OSA. 2. Elevated BMI of subjects with OSA implies their greater cardiovascular risk.