Risk factors for severity of obstructive sleep apnea

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Objectives: Patients with obstructive sleep apnoea syndrome are at increased risk for a broad range of cardiovascular (systemic hypertension, pulmonary arterial hypertension, coronary artery disease, cardiac arrhythmias, heart failure, stroke and motor vehicle crashes) and metabolic comorbidities (insulin resistance, diabetes, and metabolic syndrome). The aim of this study was to evaluate the relationship between comorbidities and severity of obstructive sleep apnea syndrome.

Methods: 50 consecutive patients with suspected obstructive sleep apnea were enrolled into the study. Age, gender, anthropometric, overnight cardio-respiratory monitoring data and comorbidities were analysed.

Results: The mean age of the subjects was 54.7±12.8 years, 82% males and 18% females. The mean BMI was 31.9±6 kg/m2. Spearman correlation coefficient analysis demonstrates a significant positive correlation between the hypertension and the apnea hypopnea index (r=0.55, p<0.05), the desaturation index (r=0.6, p<0.05). Obesity and diabetes mellitus correlated weaker with these indexes. The forward stepwise regression analysis shows that the hypertension and diabetes mellitus are important predictors of severity of obstructive sleep apnea which explains 40% of the apnea hypopnea index.

Conclusion: The hypertension and diabetes mellitus in patients with obstructive sleep apnea are independent risk factors for severity of obstructive sleep apnea.

Biography
Alexandru Corlateanu has completed his PhD at the age of 30 years from State Medical and Pharmaceutical University «Nicolae Testemitanu», Republic of Moldova, Chisinau. He is the Vice-Dean Faculty Medicine Nr.1 and associate professor at the Department of Respiratory Medicine/Allergology, State Medical and Pharmaceutical University Nicolae Testemitanu, Republic of Moldova, Chisinau. He has published more than 35 papers in reputed journals and has been serving as an editorial board member of repute.

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