

## OBSTRUCTIVE SLEEP APNEA ASSOCIATED WITH A RANGE OF CARDIOMETABOLIC DISEASES

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**Background.** Obstructive sleep apnea (OSA) is a common sleep disorder characterized by repetitive episodes of partial or complete upper airway obstruction during sleep, leading to intermittent hypoxia and sleep fragmentation. OSA is known to be, including hypertension, diabetes, dyslipidemia, and cardiovascular disease. **Objective of the study.** Presentation of the clinical case of a patient with OSA. **Material and methods.** This case report describes a 65-year-old female patient with a history of snoring, daytime sleepiness, hypertension and an MI event in 2022, who was diagnosed with moderate-severe obstructive OSA based on a sleep study (polysomnography). **Results.** The patient underwent assessments for cardiometabolic diseases, including fasting blood glucose, lipid profile, and echocardiography. Her baseline physical characteristics were as follows: height, 165 cm; weight, 109 kg; body mass index (BMI), 35.6 kg/m<sup>2</sup>; blood pressure, 168/98 mmHg; body temperature, pulse, 82 beats/min; and respiratory rate, 26 breaths/min. She had been consuming medication for hypertension for a 6 years without any other distinguished medical history; she did not smoke or drink. A blood test, peripheral blood smear examination (PBS), urine test, and electrocardiography was conducted to detect any possible medical condition that may have been the cause of OSA.

The blood test revealed a fasting blood glucose level of 10 mmol/L; the test values for glycated hemoglobin and total red blood cell count as well as the levels of hemoglobin, hematocrit, blood electrolytes, blood urea nitrogen, and creatinine were all normal. The investigation of the PBS and urine examinations did not reveal any abnormalities. The biochemical results revealed the presence of dyslipidemia. The electrocardiography and echocardiography identified left ventricular hypertrophy. The patient was treated with continuous positive airway pressure (CPAP) therapy, which resulted in significant improvement in OSA symptoms and cardiometabolic markers. This case highlights the importance of early diagnosis and management of OSA in patients with cardiometabolic diseases to prevent their progression and improve overall health outcomes. **Conclusions.** The particularities of the presented patient with moderate-severe obstructive OSA female were clinical presentation with history of snoring, daytime sleepiness, and presence of risk factors: obesity, dyslipidemia, hypertension, diabetes mellitus and myocardial infarction. Proper screening for obstructive sleep apnea among patients with cardiometabolic diseases is important for preventing cardiovascular pathologies caused by this disorder. **Keywords:** Obstructive sleep apnea.