INFLUENCE OF BODY MASS INDEX ON TREATMENT OF BREATHING-RELATED SLEEP DISORDERS

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Breathing-related sleep disorders cover several conditions (isolated snoring, UARS - upper airway resistance syndrome, obstructive sleep apnoea, hypopnoea, obesity hypoventilation syndrome) characterised by a variety of symptoms and complex aetiology. The conditions can be successfully treated in most cases. Excessive body mass is a factor increasing the probability of the disorders. In most patients it is the only reason for breathing-related sleep disorders. However, it often coexists with various anatomical abnormalities in the upper airway, endocrinological diseases or genetic defects of the facial skeleton, and occurs more frequently in older people, especially men. Excessive body mass significantly affects the range and success of the treatment.

The objective of this study was to analyse treatment outcome in patients treated at the otolaryngology unit for snoring and derivative diseases with submucosal tissue reduction within the nasal cavity, pharynx and soft palate. Patients were selected into three study groups: 1) with normal BMI; 2) overweight; 3) obese. The BMI value was compared to the severity of breathing disorders during sleep, with the incidence of other systemic diseases (e.g. hypertension, diabetes) and treatment outcome. The analysis demonstrated the significant influence of body mass on snoring, particularly in complicated and very severe types, such as obstructive sleep apnoea or hypopnoea, or obesity hypoventilation syndrome. Corrective interventions carried out to eliminate anatomical abnormalities causing obstruction of the upper airway provided the best therapeutic effects in patients with normal body mass.