EVALUATION OF USEFULNESS OF ELBOW SIGN IN PREDICTING SEVERITY OF OBSTRUCTIVE SLEEP APNEA SYNDROME

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Introduction. There is urgent need to develop a tool for quick preclinical evaluation of the patient with obstructive sleep apnea syndrome (OSAS). The aim of the study was to evaluate the usefulness of a short questionnaire regarding reaction of bed partner of the patient in response to loud snoring and/or witnessed apneas in predicting both diagnosis and severity of OSAS.

Material and methods: In 157 OSAS patients (107 men, 57 women, aged 58.5±10.8 years) the elbow sign (ES), i.e. positive answer to the question: "have you ever been elbowed by your bed partner because of snoring or witnessed sleep apneas?" was analysed in relation to the severity of the syndrome and the presence/degree of obesity.

Results: The positive ES was present in 86% of patients severe OSAS and in 68% of patients with mild or moderate OSAS. In non-obese patients (body mass index, BMI<30 kg/m2) the probability of occurrence of severe OSAS was 49% in patients with positive ES and 25% in patients with negative ES (p<0.01). In obese patients with BMI <40 kg/m2 the probability of severe OSAS was 76% in the patients with positive ES and 52% in the patients with negative ES (p<0.01). In morbidly obese patients the probability of severe OSAS was 91% in the patients with positive ES and 78% with negative ES (p<0.01).

Conclusions: Including elbow sign into routine questionnaire in the patients with suspicion of sleep breathing disorder increases the probability of correct preclinical diagnosis and prediction of severity of OSAS.