Sleep-related breathing disorders

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Advantages of using Apnealink Air in the diagnosis and treatment in the sleep-disordered breathing

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Introduction: Sleep-disordered breathing (SDB) is recognized as a serious health problem that concerns many people in Poland as well as in the rest of the world. Most of them are undiagnosed because of low access rate to the appropriate test - polysomnography, which requires hospitalization. An alternative solution for polysomnography is the usage of Apnealink air - a device allowing sleep diagnosis at patient's home. It allows evaluating real sleep disorders in a convenient and inexpensive way and then plan and implement an optimal treatment.

Objective: The aim of this paper is to present the diagnostic possibilities using Apnealink air as well as to present the real effects of patients' sleep analysis in the form of treatment planning. In addition, an assessment of the patient's experience while using the device (comfort and simplicity of use) is provided.

Material and method: 68 patients were examined: 21 women and 47 men. They reported in the survey (original / author questionnaire) that they have sleep disorders such as: snoring all the time, snoring only after consumption of alcohol, snoring in every position, snoring in the back, apnea. They were tested with Apnealink Air. Information on AHI (including apnea type) snoring episodes was obtained. The average heart rate during sleep was determined. This data was combined with BMI, age and other characteristics. The results were analyzed statistically.

Results: 54% of the subjects had sleep apnea: 32% were mild, 6% moderate and 16% severe. All cases of severe apnea were present in men. It was found that the examined women are significantly older than the men studied. Only one had a moderate apnea, while nine had a mild form of apnea. People with severe sleep apnea have a significantly higher average value of heart rate in relation to other groups.

Conclusions: Sleep apnea is more common and occurs earlier in men. Average BMI in people without apnea is significantly lower than in people with apnea. The mean BMI for people with severe apnea is significantly higher than for those with moderate apnea. In people with severe sleep apnea, the cardiovascular system is more stressed (In people with severe sleep apnea, the loading of the cardiovascular system is greater).