THE CLINICAL UTILITY OF BERLIN QUESTIONNAIRE IN COMPARISON TO POLYSOMNOGRAPHY IN POLISH PATIENTS WITH OBSTRUCTIVE SLEEP APNEA

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The aim of this study was to assess the utility of the Berlin questionnaire (BQ) in Polish adult patients at high risk of Obstructive Sleep Apnea (OSA.

Sixty four patients were recruited for diagnostics of sleep disturbances. Anthropometric assessment included measurement of body weight and height. The polysomnography was used as the standard method for OSA diagnosis. The BQ consists of 3 categories (1- snoring, 2 - daytime somnolence, 3 - hypertension and Body Mass Index (BMI) related to the risk of having sleep apnea). Sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) were evaluated. Likelihood Ratio (LR) was used to assess diagnostic accuracy.

The mean value of BMI indicated obesity in studied patients (Mean±SD: 31.9±6.). PSG identified 73.4% of the patients as having OSA (AHI>5), where BQ categorized 87.5% of the patients at high risk of OSA. Sensitivity of the BQ was 87.2%, specificity was 11.8%, PPV was 73.2% and NPV was 25.0%. Diagnostic accuracy assessed by LR had value of 1.00. BQ had false discovery rate of 31.2% and misclassification rate of 32.8%.

BQ is a sensitive tool, which should be used in settings where benefits of high sensitivity outweigh the disadvantage of low specificity.