

Hypertension, obesity and STOP-Bang questionnaire in detecting obstructive sleep apnea

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Introduction: Breathing-related sleep disorders (out of them, especially obstructive sleep apnea (OSA)) are often present in obese patients. Significant correlation between conditions such as OSA or metabolic syndrome and some anthropometric measures, most notably neck circumference (NC) has been found¹. Our goal was to examine the difference in STOP-Bang questionnaire score in obese patients depending on presence of hypertension and to see whether the use of it can be useful as a screening test for OSA.

Patients and Methods: This cross-sectional study was carried out in a tertiary healthcare centre in an outpatient clinic for treatment of obesity. 49 participants (BMI >30kg/m²) were included. Welch t-tests were used to compare STOP-Bang questionnaire scores to our researched subjects.

Results: Mean age was 50.29±11.91 years. Overall mean BMI was 44.64±8.12 kg/m². There was not significant correlation between STOP-Bang questionnaire score and sex: $t(9.486)=-2.17$; $p=.06$, diabetes mellitus: $t(7.821)=-2.07$; $p=.07$ nor prediabetes: $t(19.696)=-0.92$; $p=.37$. However, patients with hypertension (**Figure 1**) had significantly higher score on STOP questionnaire than patients without hypertension: $t(24)=-3.32$; $p=.003$.

Conclusion: Our results showed that obese patients with hypertension have higher score on the STOP-Bang questionnaire and consequently higher chance of OSA. Bakhai *et al.* have also shown that hypertension is an independent risk factor for OSA². Thus, the STOP-Bang questionnaire could be an effective tool in obese hypertensive patients as a screening test to increase the percentage of newly diagnosed OSA and initiate timely treatment.

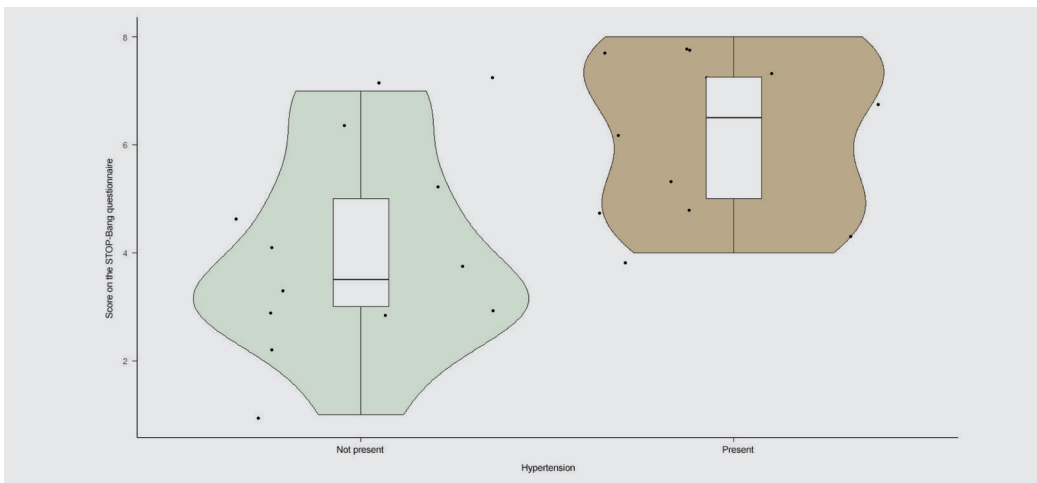


FIGURE 1. Results on the STOP-Bang questionnaire depending on the presence of hypertension.

LITERATURE

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