

AUTHORS' REPLY

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Dear Sir,

We thank Pranevicius et al for their comments on our paper.⁽¹⁾ In our study, we found that, although one in four patients with STOP-BANG scores ≥ 3 was at risk of a perioperative adverse event, patients with STOP-BANG scores ≥ 5 had a five-fold increase in risk. Therefore, preoperative polysomnography may be considered and perioperative risk mitigation measures should be undertaken in these patients.

Data from our original paper was re-analysed by Pranevicius et al using analysis of variance and the Bonferroni correction, and a STOP-BANG score ≥ 3 was counter-proposed to trigger evaluation for sleep-disordered breathing.⁽²⁾ Similarly, the utility of the STOP-BANG questionnaire in stratifying patients at risk of perioperative complications has been demonstrated, with STOP-BANG scores ≥ 3 correlating with an increased risk of perioperative complications.^(3,4)

Polysomnography, the gold standard in obstructive sleep apnoea (OSA) diagnosis, is costly, time-consuming and resource-intensive. Previously published clinical practice guidelines have recommended that perioperative patients at intermediate risk (STOP-BANG score of 3–4), or patients at high risk (STOP-BANG score of 5–8) undergoing non-major surgery without significant comorbidities may proceed to surgery with risk mitigation strategies.⁽⁵⁾

A 'dose-effect relationship' between increasing STOP-BANG scores and OSA was demonstrated by Chung et al in a 2012 study evaluating the association between STOP-BANG scores and the probability of OSA. The authors concluded that a STOP-BANG score of 5–8 identified patients with a high probability of moderate/severe OSA.⁽⁶⁾

In a recent publication, Chung et al presented a two-step strategy using the STOP-BANG questionnaire to identify patients with high probability of moderate to severe OSA. In their algorithm, the authors showed that patients with STOP-BANG scores of 3–4 may be at high risk for moderate to severe OSA if they are male, have a high body mass index, large neck circumference or high serum bicarbonate level.⁽⁷⁾

With these recent developments, the decision for preoperative evaluation of OSA with polysomnography should be made based on individual cases, taking into account the specific profile and comorbidities of the patient, and the nature of the surgery. Further prospective clinical studies would be required to evaluate the utility of polysomnography for perioperative patients with STOP-BANG scores ≥ 3 versus STOP-BANG scores ≥ 5 .

Yours sincerely,

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