Blog: Perioperative Evaluation of Sleep Apnea
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The STOP-BANG questionnaire (see explanation of acronym below) is a reliable means of not only screening for patients at risk for Obstructive Sleep Apnea (OSA) but also for stratifying the potential severity of the OSA risk in patients. Thus, it is a widely-accepted way of assessing patients who have not had a formal sleep study.

At the Brooklyn Hospital Center, we screen for OSA using a similar tool. The admitting nurse identifies “OSA alert” patients by placing a blue wristband on them. The anesthesiologist then has a cue to take extra precautions when he/she assesses an OSA risk patient for anesthesia and surgery. Opioid-sparing techniques with use of non-narcotic adjuvants (e.g. Tylenol, celebrex) are considered in an attempt to minimize OSA-related hypoxic events in the perioperative setting.

While the STOP-BANG questionnaire is useful as a screening tool for OSA, there are other factors which contribute to the safe care of a patient with suspected OSA. Co-existing disease must be considered in light of the increased cardiopulmonary impact of OSA as an exacerbating co-morbidity. The anatomic location of the intended surgery is a consideration, especially when considering any procedure around the airway which may place a patient at further risk for respiratory complications in the post-operative period. The invasiveness of the procedure is a third factor, as certain procedures are associated with high-narcotic requirements for patients which can contribute to respiratory depression.

The goal of treating an OSA patient in the perioperative arena is to keep the patient in the safest, most appropriate environment so as to minimize negative respiratory events. A monitored setting should be utilized as appropriate, especially if the patient has high narcotic requirements or requires an intravenous patient controlled analgesia (IVPCA) pump.

Patient education is a part of perioperative care and can be as important as the actual care itself. Speaking with a patient about the results of the STOP-BANG questionnaire is a key step so that the patient understands that an OSA risk alert not only applies in the hospital setting, but every day of his/her life. The patient needs to understand the long-term effects of OSA and that there are treatment options which can improve the associated symptoms while also stemming the long-term deleterious effects of OSA.

STOP-BANG QUESTIONNAIRE

S = Snoring. Do you snore loudly (louder than talking or loud enough to be heard through closed doors)?
T = Tiredness. Do you often feel tired, fatigued, or sleepy during the daytime?
O = Observed apnea. Has anyone observed you stop breathing during your sleep?
P = Pressure. Do you have or are you being treated for high blood pressure?
B = BMI > 35 kg/m2
A = Age > 50 yrs
N = Neck circumference > 40 cm
G = Male gender.

Fewer than 3 questions positive = low risk of OSA; 3 or more questions positive: high risk of OSA; 5 to 8 questions positive: high probability of moderate-severe OSA

Adapted from:
STOP questionnaire: a tool to screen patients for obstructive sleep apnea.