Reducing Perioperative Complications in Patients with Obstructive Sleep Apnea

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Obstructive sleep apnea (OSA) is a sleep-related breathing disorder commonly undiagnosed during the preoperative evaluation of surgical patients. Patients with OSA are at increased risk for developing cardiovascular, pulmonary, and endocrine comorbidities. Failure to diagnose patients with OSA is associated with perioperative complications, such as difficult or failed airway management, cardiopulmonary arrest, and death. In addition, the use of benzodiazepine and opioid medications can negatively affect the postoperative management of patients with OSA. Best practice guidelines from the American Society of Anesthesiologists and Society of Anesthesia and Sleep Medicine support using the STOP-Bang questionnaire to preoperatively screen for patients with OSA. The purpose of this evidence-based project was to highlight OSA clinical practice guidelines and implement an online OSA educational module for anesthesia providers at a Southern California medical center. Using the Iowa Model framework as a guide, the best available evidence was evaluated and utilized to create an educational module to strengthen knowledge among anesthesia providers on the perioperative management of OSA. Pre- and post-module chart audits were conducted to monitor the STOP-Bang questionnaire completion rate, midazolam and opioid administration, and postoperative adverse events. While there were minimal differences in midazolam and opioid administration, there was an increase in the number of STOP-Bang questionnaires completed post-intervention. No adverse events were observed post-intervention. A larger sample size is needed to evaluate the effect of this educational module on the perioperative management of OSA patients.