Clinic Discharge Opioid Prescribing Patterns in Surgical Patients with Obstructive Sleep Apnea

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Background: In the environment of the current opioid epidemic, it is important to establish prescribing patterns for postoperative opioid analgesics, especially in vulnerable populations with increased risks for complications. Obstructive sleep apnea (OSA) is known to be associated with an increased risk of respiratory and cardiac complications. Thus, OSA is a risk factor for complications associated with perioperative opioid use. Several guidelines recommend identifying patients with or at risk for OSA preoperatively. In patients with known or suspected OSA, postoperative analgesia that minimizes the use of opioids is recommended. We hypothesize that despite these recommendations, surgical patients with known or suspected OSA are prescribed opioids up on discharge at a similar rate as those without OSA.

Methods: This was a retrospective analysis of the electronic health record of surgical patients from November 2016 to April 2017 at a single academic institution. Patients with a known diagnosis of OSA or a STOP-Bang score greater than or equal to 5 were identified and compared to a group without OSA to determine if there is an association with discharge prescriptions on opioid medications.

Results: Of the 19498 patients analyzed, 1784 (9.2%) had OSA or a STOP-Bang score greater than or equal to 5. Of these patients, 1474 (83%) were discharged on opioid medications. Of the patients without OSA, 73% were discharged on opioid medications. A multivariate regression analysis adjusting for confounders results in an odds ratio of being prescribed opioids of 0.97 (95% confidence interval 0.83-1.13, p=0.59).

Conclusion: This study shows that surgical patients with OSA or a STOP-Bang score greater than or equal to 5 our were equally likely as patients without OSA to be prescribed opioids upon discharge despite guidelines that recommend minimizing opioid use in OSA patients. These patients are thus possibly at risk for opioid related complications. These findings indicate a need to implement different strategies to reduce the prescription of opioids to patients with OSA.