IS A STANDARD OF CARE FOR PATIENTS WITH OBSTRUCTIVE SLEEP APNEA AN EFFECTIVE TOOL IN PROVIDING SAFE OUTCOMES IN PACU?

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Identification of the problem: Publications and practice guidelines from the perianesthesia community suggest standardized, longer observation in PACU promotes safety after general anesthesia. This initiative can increase cost, increase staffing demand and limit throughput. Patient satisfaction may be compromised as patients deal with environmental concerns of noise and lack of privacy in PACU. A CINHAL literature review of 35 articles produced insufficient evidence supporting longer monitoring of OSA patients improved PACU, outcomes.

Purpose: To determine if standardized care of the patient with OSA impacts patient outcomes by preventing postoperative oxygen desaturation and respiratory symptoms after general anesthesia.

Methods: Electronic Medical Records of Post-Anesthesia Care Unit patients (N= 602) were retrospectively analyzed for the presence of OSA diagnosis and STOP risk scores during a perioperative encounter at a hospital based main Operating Room. Information was compared to the post-operative oxygen saturation in PACU and nursing respiratory assessment documentation. Respiratory symptoms, predefined in nursing documentation fields, include "shortness of breath, difficulty breathing at rest, intubated, persistent cough or other (obstruction)". Negative result findings of respiratory symptoms are documented as "none reported". Patients were on 100% non-rebreather upon admission and immediately weaned to room air as tolerated. Patients met criteria for PACU discharge based on modified Aldrete score of 9 or higher.

Results: The majority of patients (96.5%) did not experience oxygen desaturation regardless of OSA diagnosis or STOP score. This sample showed the mean oxygen saturation of 97% is independent of STOP score or OSA diagnosis. There was no evidence extracted from this sample that suggested OSA patients experienced a higher incidence of respiratory symptoms while in the PACU. Patients with the highest OSA risk had the lowest incidence of respiratory symptoms. Respiratory events (3.5%), including prolonged intubation, may be attributed to other comorbid factors, independent of OSA. PACU length of stay due to medical reason was longer for patients without OSA, most likely due to surgical complexity.

Discussion: This study did not affirm OSA patients experienced a higher incidence of oxygen desaturation or respiratory symptoms despite receiving additional monitoring in PACU. A custom approach to care would be sufficient to promote safe outcomes for OSA patients in the perioperative suite. This would promote safety by allowing those with genuine risk for airway difficulties to be monitored closely in PACU and eliminate unnecessary monitoring for those

who meet criteria for PACU discharge. This patient specific approach to care can enhance throughput, reduce staff workload and improve patient satisfaction.