CORRELATIONAL STUDY OF SLEEP APNEA PATIENTS’ CHARACTERISTICS WITH DISCHARGE LOCATIONS

Primary Investigator: Esther Lee, MNP, MBA, RN
UCSD Health System, San Diego, California
Co-Investigators: JoAnn Daugherty, PhD, RN, CNL, Joseph Burkard, DNSc, DPNC, CRNA

Introduction: Obstructive sleep apnea (OSA) is characterized by intermittent, partial or complete upper airway collapse resulting in upper airway occlusion which disrupts sleep architecture and impairs gaseous exchange during sleep. The causes of OSA are multifactorial which may include comorbidities, anatomical, neural and physiological factors.

Identification of the problem: OSA patients present a unique challenge during the perioperative period due to increased risk to patients associated with unexpected life threaten events.

Purpose of the Study: The aims of this study are: to determine if there is a correlation between OSA patients’ characteristics and PACU discharge locations; to learn the characteristics of patients at-risk of adverse events in PACU stay.

Methodology: A single-site retrospective correlational study design was chosen. Samples of all adult OSA patients 18 years of age and older were included in the analysis. A chart review of 153 patients for fifteen (15) variables was conducted. Data analysis included descriptive and correlational tests to determine the relationship between variables and discharge locations.

Results: The correlations significant (p < .05) with discharge location were age>60, ASA classification, anesthesia type and narcotics use in PACU. Five patients who experienced extreme adverse events shared similar correlational factors with the exception of age.

Discussion: This retrospective study was conducted to answer whether OSA patients’ characteristics correlate with their discharge locations and explore patients’ risk factors contributing to adverse events during their recovery period. Research and practice recommendations are described to improve postoperative monitoring and safer patient management.

Conclusion: Several risk factors were identified to impact the postoperative experience of surgical patients with OSA and correlated with their PACU discharge disposition. These findings are consistent with external studies except BMI which was nonsignificant. Narcotic use in PACU and ASA class III patients appear to be at greater risk of experiencing adverse events. These results highlighted implications for clinical practice and areas for future research.

Implications for perianesthesia nurses and future research: Post-research recommendations include: Classify surgical patients of ASA III and age>60 years as high risk to qualify for additional monitoring and joint capnography and oximetry monitoring; implement follow-up phone call to patients discharged home to learn their post-operative health status; develop evidenced-based protocols for decreased narcotic use in PACU for anesthesia patients.