DESCRIPTIVE CHARACTERISTICS OF OBSTRUCTIVE SLEEP APNEA PATIENTS AT RISK OF LONGER POST-OPERATIVE HOSPITAL STAY

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Introduction: Obstructive sleep apnea (OSA) is defined as the occurrence of at least five apnea and hypopnea episodes in an hour accompanied by a decrease of oxygen saturation exceeding 4%. OSA may increase perioperative risk in patients requiring general anesthesia, sedation or intravenous analgesia.

Purpose: The aim of this project is to examine the characteristics of OSA patients with postoperative risk in elective surgery and which risk factors that may lead to a longer length of hospital stay.

Methods: A single site retrospective chart review study was chosen using a sample of 49 adults 18 years and older screened for OSA using the STOP questionnaire. The inclusion criteria were patients admitted between November 2012 – April 2013 for elective surgery with history of OSA risk and length of stay in the PACU greater than 2 hours. Data analysis were performed using SPSS for Windows (Version 22).

Results: The study results of a previous project showed that age>60, ASA classifications, anesthesia type and narcotic use in the post anesthesia recovery period were statistically significant factors correlating to postoperative adverse events. This study showed ASA classification and the number of Desaturations were variables correlated to the patients' extended length of stay in PACU.

Discussion: This is a small, retrospective, non-randomized study to find more correlations of the rate of oxygen saturation in PACU–bedside nursing care. BMI was found to be a non-risk factor. Treatment biases that guide MD's clinical decision making have led to more variability in treatment decisions.

Conclusion: The original study of 153 cases discovered a subset of subjects were at risk of extended length of stay in PACU ≥ 2 hours. ASA classification and the episodes of Desaturation were statistically significant factors correlated with patients' length of stay in PACU.

Implications for Clinical Practice: Consistent and complete use of the STOP-BANG questionnaire will enhance care. Post discharged follow-up phone calls to elicit patient feedback facilitates development of effective policies and protocols for safe and optimal care.

Implications Future Research: More research is required to understand factors contributing to abnormally high episodes of desaturation among at-risk patients. Examine the use of regional block to reduced narcotic use for OSA patients in PACU.