SLEEP APNEA: A WAKE UP CALL...FOR NURSES
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Background: Obstructive sleep apnea (OSA) is a sleep disorder with an estimated prevalence between 2% and 25% in the general population. In patients undergoing elective surgery, the prevalence is higher. Studies reveal that sedation and anesthesia increase the risk of postoperative complications. Identifying patients pre-operatively to initiate appropriate interventions is prudent.

Purpose: The purpose of this quantitative study was to develop and implement an interdisciplinary protocol to assist with early identification and interventions in targeted high risk OSA patients undergoing elective surgery.

Methods: An evidence-based protocol was developed. Education on OSA and the protocol was provided for all direct patient caregivers. The population included patients undergoing elective colorectal and gynecologic oncology surgery over an 11 week time period. Patients who scored 3 or higher on the STOP-BANG screening tool were placed on the protocol: primary physicians were notified and results were reported to Anesthesia. Per PACU monitoring criteria, additional interventions i.e. positioning, continuous oximetry, telemetry and OSA adult analgesic orders were implemented on the surgical unit. Patient education included a video and discharge education.

Results: The number of patients screened in this study was 365; 302 patients (83%) screened negative and 63 (17%) screened positive for high risk OSA. The identified 63 (17%) high risk patients were placed on the protocol. In this high risk group, protocol implementation resulted in earlier identification of events and intervention for the following high risk patients: 5 patients (8%) experienced two or more events in PACU that required cardiac and continuous pulse oximetry monitoring; 4 patients (6%) experienced two or more events in the PACU requiring C-PAP/BiPAP; 2 patients (3%) sustained oxygen desaturation below 90%; 2 patients (3%) developed arrhythmias; 23 patients (37%) had a minimum 20% change from admission heart rate and 32% had a minimum 20% change from admission blood pressure; none required transfer to ICU. The patients received lower analgesic doses. No reversal of analgesia was necessary.

Implications: The findings are consistent with the literature. Implementation of the STOP-BANG screening tool and the protocol facilitated early identification and timely interventions. The findings suggest application to the broader surgical patient population.