USING CAPNOGRAPHY TO PREDICT OSA IN UNDIAGNOSED PATIENTS WITH HIGH STOP-BANG SCORES

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Introduction: The 2012-2014 American Society of PeriAnesthesia Nursing Standards promote the use of capnography in PACU "if available and indicated."

Identification of the problem: Due to a limited number of capnography modules available in this PACU setting, a process is needed to determine the appropriate use of available equipment when a greater number of patients are at high risk on the STOP-BANG assessment.

Purpose of the Study: Data was collected to determine if there is a correlation between the preoperative STOP-BANG scores of high risk and ETCO2 determinations in the PACU? Could the additional assessment of the American Society of Anesthesia (ASA) Classification of Risk score be used in conjunction with the STOP-BANG score stress the importance of capnography in the PACU?

Methodology: An audit tool was devised to include a preoperative assessment by the ASU staff of the STOP-BANG score. All patients with a STOP-BANG score of 5, 6, 7, and 8 were considered to be at highest risk and therefore were candidates for ETCO2 monitoring in PACU. The ASA Classification of Risk score was noted on the patient's anesthesia record and recorded on the audit tool.

Results: 82 patients met the criteria and participated in the study with 33 (40%) experiencing elevated ETCO2 scores in the PACU. 28 (34%) had an ASA score of 3 and 52 (63%) had an ASA score of 2.

Conclusion: The findings of this study led to the purchase of ETCO2 modules for every monitor in the PACU as well as modules for use on the postsurgical units.

Implications for perianesthesia nurses and future research: Continuing education on the use of ETCO2 monitors is needed. A multidisciplinary team of nursing and respiratory therapy is currently collaborating to develop an evidenced based protocol for ETCO2 monitoring when OSA is suspected in the surgical patient.