

## **THE EFFECT OF THE USE OF A SIMPLIFIED RISK ASSESSMENT TOOL ON POST OPERATIVE NAUSEA AND VOMITING**

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**Introduction:** PONV is the most frequent side effect after anesthesia. It can cause significant morbidity. PONV is distressing for patients, and affects their hospital experience.

**Identification of the Problem:** The recommendation of the ASPAN Evidence Based Clinical Practice Guideline for the Prevention and /or Management of PONV is to assess for risk factors using the Apfel or Koivurant tool. There is no current risk mechanism in place at Paoli Hospital.

**Purpose of the Study:** To determine if rates of PONV can be reduced by assessing patients' risk for PONV.

**Methodology:** The study used a comparative design, (200 in the intervention, and 200 in the control). All were adults undergoing surgical procedures at Paoli Hospital admitted the day of surgery. The risk for the control group was determined by chart review of the electronic record. For the study group, informed consent was obtained, PONV risk was calculated using the Apfel tool. The anesthesia provider acknowledged the calculated risk by signing the tool. Prior to the start of the study, all staff was formally in serviced on the Apfel tool.

**Results:** There was no statistical difference between the rates of PONV (measured by the administration of a rescue medication) between the control and the study group. At the request of the IRB, additional confounding data points were collected and statistically imposed on the rates of PONV. These data points included; anesthesia technique, medication and surgical type.

**Discussion:** The lack of disparity between groups could represent vigilance on the part of the anesthesia providers independent of a risk assessment tool. It may also represent barriers and beliefs surrounding patient risk for PONV that were not influenced by the education and implementation of the Apfel tool.

**Conclusion:** The significant statistical finding of my study was that patient's who undergo a laparoscopic procedure are at increased risk for PONV.

**Implications for perianesthesia nurses and future research:** Future investigation is needed to determine whether barriers and beliefs of the anesthesia providers hold more weight in practice than a PONV risk assessment. A simple questionnaire to the anesthesia providers may shed light on that. I feel it is important to focus on nursing behaviors that influence patient outcomes. Aromatherapy is an avenue that shows promise in PONV.