## PREVENTION OF POST OPERATIVE NAUSEA AND VOMITING WITH PRE-OPERATIVE INTERVENTION

Primary Investigators: Melodie Richardson, BSN, RN, Jenny Plunkett, BSN, RN,
Jackie Harrison, ASN, RN
Hendricks Regional Health, Danville, Indiana
Co-Investigators: Sherry Cole, BSN, RN, Doris Gipson, BSN, RN, CMSRN,
Doris Winkle, BSN, RN, CAPA

**Identification of the problem-Overview:** Post operative nausea and vomiting (PONV) can lead to serious complications, extended length of stay, increased cost of medical treatment, and dissatisfaction with the surgical experience. A search using the parameters of "PONV" and of "prevention of PONV" led to several articles supporting this statement.

**EP Question/Purpose:** Does preoperative administration of a neurokinin receptor antagonist and/or a histamine antagonist in ambulatory surgical patients receiving general anesthesia decrease the incidence of PONV?

**Methods/Evidence:** The procedures used for this evidence-based project included performing retrospective chart reviews of a convenience sample of patients who had ambulatory surgery with general anesthesia and a history of PONV. A total of 36 chart reviews were performed. Twenty-one patients were treated preoperatively with one or both of the medications to prevent PONV and 15 did not receive either of these medications.

**Significance of the study/Outcomes:** We found a reduction in the incidence of PONV in the patients who had received a neurokinin receptor antagonist and/or a histamine antagonist preoperatively as compared to those who did not receive either medication. The incidence of PONV went from 47% in the group who did not receive the medications to 24% in the group that did receive the medications in the study. Our study showed that the use of these medications preoperatively in patients with a history of PONV can be beneficial in reducing or eliminating PONV.

Implications for perianesthesia nurses and future research: As nurses, we want to provide the best outcomes and surgical experience possible for each patient. This includes utilizing available therapies which result in prevention of complications or adverse effects such as PONV. Our study indicates improved outcomes in the area of PONV with the preoperative use of the studied medications. Additional research is needed to examine the effects of these and other medications, alone or in combination with each other, that would best benefit our surgical patients in preventing PONV.