AN EXPLORATION OF THE INCIDENCE OF UNPLANNED PERIOPERATIVE HYPOTHERMIA (UPH) AND SURGICAL SITE INFECTION (SSI) IN THE AMBULATORY SURGICAL PATIENT: A PILOT STUDY
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Introduction: Unplanned perioperative hypothermia (UPH) is a common occurrence in surgical patients in both inpatient and outpatient settings, and has been associated with a 68% increase in the incidence of SSI. The ASPAN Guideline for the Promotion of Perioperative Normothermia recommends numerous perioperative interventions as a means of maintaining normothermia throughout the surgical continuum.

Identification of the Problem: Outpatient surgeries comprise 75% of all surgeries; however, the incidence of UPH in the ambulatory surgical population, as well as the relationship of warming interventions to the development of UPH is not well elucidated.

Purpose of the Study: The purpose of this study was to describe the incidence of UPH in an outpatient surgical population of a large regional-referral healthcare setting. The effect of evidence-based interventions associated with the prevention of UPH was also explored.

Methodology: A retrospective exploratory design was used. Data were abstracted electronically from a purposive convenience sample of medical records. Independent variables included all risk factors and confounding variables associated with the development of UPH. Dependent variables included postoperative patient temperature and incidence of UPH. Descriptive statistics included measures of central tendency and frequency measures. Regression was used to explore the relationships of the independent variables to development of UPH.

Results: 7102 charts were abstracted. Mean age of the sample was 54.26 years. 39.2% were male; 60.8% were female. 51% of the sample was ASA II. 59.7% of patients received general anesthesia. Mean first postoperative and last temperature was 97.9°F. Mean incidence of postoperative hypothermia was 1.0%. Regression analysis indicated no significant predictors for first postoperative temp; however age, gender, ASA status, intraoperative forced-air use, preoperative temperature, BMI, and OR and surgical time were significant predictors (p=0.00-0.008) of last postoperative temperature.

Discussion/Conclusion: Incidence of unplanned perioperative hypothermia (UPH) in this population was well below the incidence reported in the literature for the inpatient population. Predictors of last postoperative temperature; however, were consistent with current national evidence-based guidelines.

Implications for Perianesthesia Nurses & Future Research: While incidence of UPH in this population was minimal, perioperative vigilance regarding temperature management in the ambulatory surgery setting should be encouraged.