Unplanned perioperative hypothermia (UPH) (core temperature < 36 °C) may occur in 20% to 40% of surgical patients. This condition is associated with a 68% increase in the incidence of SSI and numerous adverse outcomes including myocardial infarction, increased blood loss, and increased PACU and hospital LOS. Independent variables for UPH include all risk factors and confounding variables associated with its development.

A retrospective exploratory design was used to sample a purposeful convenience sample of all adult ambulatory surgical procedures over a one-year period. Data were abstracted using electronic medical record abstraction. The incidence of UPH in the ambulatory surgical population has not been elucidated, and it is particularly of interest given that the greatest temperature loss during surgery occurs during the first hour of the procedure. Outpatient surgeries account for 75% of all procedures.

The incidence of UPH was 1.0% with a mean temperature of 97.9 °F. Mean OR time was 74.8 min. Preoperative warming interventions were associated with a lower odds of developing UPH (OR 0.97, 95% CI 0.56, 1.67). Gender (female), age, BMI, diabetes, and CV disease were also protective. Preoperative warming should be considered for the majority of patients to prevent UPH, and greater awareness of preoperative temperature may be important to overall outcome.

Intraoperative warming interventions were also examined, and intraoperative warming was associated with a lower odds of developing UPH (OR 0.98, 95% CI 0.85, 1.12). However, practical implications around the timing and type of warming interventions were noted. Further research is needed to determine the best preoperative warming interventions and their potential impact on patient outcomes.

**Limitations:**
- Duration of preoperative warming not available.
- Temperature route not always documented.

**Clinical implications:**
- Higher preoperative temperature shown to be protective.
- Female gender shown to be protective.
- Previous risk factors of increased age & lower BMI supported.
- Incidence of UPH in this population much lower than previously reported.

**Research implications:**
- Duration of preoperative warming may be an important factor in the development of UPH.
- Further research is needed to determine the best preoperative warming interventions and their potential impact on patient outcomes.

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