ACUPRESSURE IN MANAGEMENT OF POSTOPERATIVE NAUSEA & VOMITING (PONV) IN HIGH RISK AMBULATORY SURGICAL PATIENTS

Primary Investigator: Debra Hofmann, MS, APNP, ACNS-BC
Aspirus Wausau Hospital, Wausau, WI
Co-Investigators: Carrie Murray, MS, RN, ACNS-BC; Janet Beck, BSN, RN

Problem

PONV is a frequent, distressing, costly and potentially preventable traumatic phenomenon in high-risk ambulatory surgical patients that persists despite current pharmacologic prophylaxis and rescue interventions. Acupressure, an energy medicine, has shown promising results in relieving PONV in various surgical populations. There is little research specifically targeting high-risk PONV ambulatory surgical patients.

Purpose of the Study

The purpose of this randomized sham-controlled blinded study was to investigate the efficacy of preoperative placement of acupressure at P6 on PONV incidence in ambulatory surgical patients identified as high risk; measured over 24 hours at three phases of recovery: Phase I (PACU), Phase II (pre-discharge), and Phase III (24 hours post discharge).

Methodology

110 elective ambulatory surgical patients were randomly assigned to receive active acupressure beads/patch (n=57) or an inactive placebo acupressure beads/patch (n=53) placed unilaterally at P6 Chinese Medicine point 30-60 minutes prior to induction of general anesthetic. Nausea and vomiting was assessed using a visual analog scale (VAS) 0-10 during recovery Phase I and II. Participants were contacted by phone for assessment of Phase III PONV within 24-48 hours postoperatively. All participants received usual care including prophylactic and rescue antiemetics and routine instructions for managing nausea and vomiting after discharge. PACU and day surgery nurses assessing nausea and vomiting were blinded to patient group (acupressure or placebo).

Results/Discussion

Overall, 110 patients enrolled; 93 patients finished the study's three phases, 9 were admitted postoperatively and 8 dropped out or data collection on all 3 phases was incomplete. One-way ANOVA and Pearson's Correlation were used in statistical analyses. Acupressure use at P6 preoperatively significantly reduced PONV in all three postoperative phases.

Conclusion/ Implications for Practice and Future Research Acupressure is an effective minimal risk, low cost adjunctive therapy for prevention and treatment in ambulatory surgical patients at high risk for PONV. Secondary findings revealed the need for PONV risk factor assessment and evaluation. Further studies using other acupressure points should be conducted.