Perioperative Pressure Ulcer Prevention, Is It Possible?
Candace Scheresky, RN, BSN
Memorial Hermann-Texas Medical Center
Jennifer Beckwith, Debbi Bush, Stanley G. Cron, Margaret I. Ibe, Serah Ingram, Andrea Johnson, Debra E. Mulkey, Cheryl B. Stano, Carol J. Underwood

Problem: There was higher incidence of pressure ulcers in cardiovascular patients.

Strategy:
The aim of this pilot study was to determine if the prophylactic, pre-surgical application of gel adhesive hydrocellular dressings to heel, sacrum and/or trochanter decreased the incidence of pressure ulcer development in adult patients undergoing cardiovascular and cardiothoracic surgery at a large tertiary care hospital. The specific research question was, "Is there a difference in prevention of intraoperative pressure ulcer in cardiovascular/thoracic surgical patients who receive pre-surgical application of gel adhesive hydrocellular foam dressings to heel, sacrum, and/or trochanter to those who do not in the seven days after their surgical procedure?"

Methodology:
Braden and Bergstom's (1987) schema of etiologies of pressure sores was utilized as a guiding framework for this study. This randomized, comparison pilot study recruited a sample of 97 adult cardiovascular/thoracic surgical patients (49 treatment and 48 control).

Results with Evaluation:
Among those that received the dressing, 2.04% experienced a skin breakdown, while in the control group, 6.25% had a skin breakdown. A chi-square exact test comparison did not yield a statistically significant difference (p = .36). Although both groups had significant increases in Braden scores, the groups were not found to be increasing at significantly different rates (p=.661). A limitation of the study was the small sample size.

Periop Nursing Implications Recommendations:
Pressure ulcers represent a serious potential injury in the perioperative setting and have been identified as a nursing research priority. To protect the vulnerable perioperative population, it is important to continue to refine the level of nurses' understanding with respect to physiologic indices of pressure ulcer development and the most effective evidence based interventions.

Practice Change: None at this point.

Lessons Learned: Study took longer than anticipated; needed more nurses to collect the data, would need a larger study sample to be significant.
Bibliography:

