EXPLORATION OF THE USE OF THE SCOTT TRIGGERS™ INSTRUMENT IN PREDICTING POSTOPERATIVE PRESSURE ULCER RISK

Primary Investigator: Cheryl Postlewaite MSN RN CWCN
Mission Health System, Asheville, North Carolina
Co-Investigators: Jeanie Bollinger MSN RN ACCNS-AG CCRN, Sheri Denslow PhD MPH, Vallire Hooper PhD RN CPAN FAAN

Introduction: Hospital acquired pressure ulcers continue to pose a significant health problem in the US, affecting up to 3 million adults in acute care facilities at a cost of up to $11 billion annually. Surgical patients are at elevated risk for pressure ulcer development due to a combination of physiological, non-physiological, and surgical/anesthesia related factors.

Identification of the problem: The Braden Score (BrS) is well accepted as a predictor of pressure ulcer risk; however, the preoperative BrS may not accurately reflect postoperative risk. The Scott Triggers™ (ST) scale shows great potential as a preoperative predictor of postoperative pressure ulcer (PPU) risk, but has not been tested for predictive capacity.

Purpose of the study: The purpose of this study was to explore the use of the ST instrument in predicting PPU risk in surgical patients.

Methodology: A retrospective, exploratory research design using electronic medical record abstraction was used. A purposive convenience sample of medical records of all adult patients (> 18 years of age) undergoing any in-patient surgical procedure over a 1 year period was included.

Results: Data from 15,500 charts were abstracted. ST and first postoperative BrS were significantly correlated (r=-0.48, p<.01). Three of the 4 ST factors (age, ASA score, surgery duration) were predictive of a change in BrS from preoperative to postoperative assessment (p < 0.01 for each). Preoperative albumin level was not evaluated due to a lack of data. Results also showed increased pressure ulcer risk (p<0.01) with any surgery.

Discussion: Three of the 4 ST factors show great promise as indicators of PPU risk.

Conclusion: The ST instrument is a simple, preoperative risk assessment tool that can be used to assess PPU risk in the surgical population.

Implications for perianesthesia nurses and future research: Further research as to the interaction of other perioperative factors to PPU risk is indicated. Implementation of a simple, preoperative PPU risk assessment tool with strong predictive metrics will enable perianesthesia nurses to work proactively in implementing preventative interventions to reduce PPUD in the high risk surgical population. Such interventions should contribute to reduced healthcare costs and significantly improved patient outcomes.