

Numb But Not Forgotten: Dermatome Assessment to Reduce Post-Block Falls

Team Leader: Lisa Law MSN RN CAPA

Team Members: Rosemary B. Field MS APRN AOCNS, Mallory Bielski BSN RN CCRN,
Julia Silvestri MSN RN CAPA, Christina Sandman BSN RN, Patricia Belmonte MSN RN,
Kim Platt MSN RN CAPA

Cleveland Clinic Marymount Hospital, Garfield Heights, OH

Abstract Background Information: Orthopedic same day surgery patients receiving spinal anesthesia increased falls in the Post-Anesthesia Care Unit. Screening, universal and individualized fall interventions were used. Dermatome recovery assessments were inconsistent.

There is a dearth of studies describing prevalence and unique strategies to prevent falls in ambulatory orthopedic patients after spinal anesthesia. Dermatome assessment has been identified as critical in this patient population because post-operative muscle power and sensory recovery is unpredictable.

Objectives of Project: Falls in orthopedic patients receiving spinal anesthesia will decrease after nurses receive education about dermatome assessment.

Process of Implementation: Chart reviews of orthopedic patients who fell in Post-Anesthesia Care Unit (PACU) after spinal anesthesia identified inconsistencies in nurses' evaluation of the return of sensory and motor control. Barriers to dermatome documentation was discussed.

From June to August 2024, the PACU team discussed current and historical findings, lessons learned and ideas to address the practice gap. The education strategy included: information about dermatome levels affected by spinal anesthesia, access to dermatome badge backer quick reference tools and customized individual education sessions. Nurses completed three documentation audits weekly after plan was implemented.

Statement of Successful Practice: In January and May 2024, 100% of PACU falls were attributed to ambulatory orthopedic surgery patients who received spinal anesthesia and lacked dermatome assessment. After the planned intervention was implemented from June-August 2024, there have been no PACU falls attributed to this patient population. Dermatome documentation compliance improved.

Implications for Advancing the Practice of Perianesthesia Nursing: Dermatome assessment prior to ambulation decreases patients' risk for falls. Education on dermatomes and process confirmation to reinforce consistent practice of dermatome assessment and documentation, decreased falls in the growing orthopedic patient population who received spinal anesthesia during a 14-month period.