ONSET OF PAIN AFTER SPINAL ANESTHESIA

Team Leader: Pamela Luz Bernaldez Guarin BSN RN CPAN Suburban Hospital Johns Hopkins Medicine, Bethesda, Maryland

Background Information: Patients who had spinal anesthesia for hip replacement experience increasing or sudden excruciating pain upon arrival to the orthopedic floor from the PACU. Postoperative pain management orders does not include premedication of oral analgesics for patients who report no pain in the PACU.

Objectives of the Project: To find out the average time and dermatome level when the onset of pain occurs after spinal anesthesia in total hip replacement patients. In addition, the purpose is to determine whether patients should be premedicated for pain in the PACU at a certain time or dermatome level to reduce a possible severe pain occurrence at patient's transfer to the orthopedic unit when the effect of spinal anesthesia is wearing off.

Process of Implementation: Data collection tool was created and data was obtained by reviewing patient's electronic chart. Eighty three patients who had total hip replacements with spinal anesthesia were selected in the study during a 4 month period. Data was collected when the first analgesic was given which included the time, dermatome level and pain scale. The length of observation was between 0-4 hours from admission in the PACU and before transfer to the orthopedic unit. Findings showed a significant number of patients (68%) who reported pain after spinal anesthesia between 0-2 hours postoperatively with a pain scale ranging the highest between 4-6 and 7-10 out of 10 pain scale. Pain occurred highest at dermatome levels L1-L2 (23%).

Statement of Successful Practice: A thorough dermatome and pain assessment along with educating patients, close collaboration with surgeons, anesthesia provider and the receiving orthopedic nurse to get ahead of the pain has contributed to a pain free experience and patient satisfaction.

Implications for Advancing the Practice of Perianesthesia Nursing: Heightened awareness of the sudden surge of pain after spinal anesthesia propels perianesthesia nurses to vigorously find an efficient way to manage pain before it occurs. This could entail involvement with the surgeons and anesthesia provider in creating a multimodal pain management protocol to efficiently manage pain in this patient population. Studies showed pain is low after spinal anesthesia in total hip arthroplasty when multimodal oral analgesic approach is used.