

Decreasing the Incidence of Post-Operative Urinary Retention (POUR) and Incontinence with the Total Joint Replacement Patients after Spinal Anesthesia in the Post Anesthesia Care Unit (PACU): A Quality Improvement Project

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Introduction: Patients with POUR can develop bladder atrophy, urinary incontinence and hypertension.

Identification of the problem: After spinal anesthesia, orthopedic patients frequently presented to PACU with full bladders resulting in 14% (n=10) of total knee replacement patients and 6% (n=5) of total hip replacement patients experiencing urinary incontinence. Bladder scanning was not routinely performed.

Purpose of the study: The purpose of this quality improvement project was to implement standardized guidelines for bladder scanning for patients who have total knee or hip replacement to decrease POUR and incontinent episodes.

Methods: Patients were bladder scanned within the first hour of PACU admission. Straight catheterization was performed for more than 400ml of retained urine. The protocol included both total knee and total hip placement surgeries with spinal anesthesia. Compliance with scanning, percentages with POUR and incontinent episodes were reviewed.

Results: POUR was detected in 46% of total knee patients and 36% of total hip patients. Incontinence rates for knee patients decreased by 14% and by 2% for patients with total hip replacements.

Discussion: The literature supports the results stating that bladder scanning is important in decreasing POUR. In study phase 2, the enhanced recovery after surgery program resulted in more patients being admitted with indwelling catheters; continued decline in the number of patients requiring a scan may have effected protocol compliance.

Conclusion: A bladder scanning protocol decreases post-operative incontinence. Bladder scanning also helps decrease POUR by decreasing the potential risk of complications.

Implications: Bladder scanning is an effective way to screen for bladder distention by decreasing POUR and incontinence in postoperative patients with knee and hip replacements.