Implementation of Geriatric Fracture Program Improves Use of Resources and Decreases Complications

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Purpose: Long-term outcomes in geriatric hip fracture patients are still poor, with patients experiencing a loss of independence and function. Utilizing comprehensive medical care and pain management strategies, geriatric fracture programs may be an effective method to improve clinical outcomes while decreasing costs. The purpose of this study was to evaluate: (1) perioperative use of resources; (2) short-term complications; and (3) 6-month mortality of geriatric hip fracture patients, before and after implementation of a co-management program.

Methods: An orthopaedic and medicine co-management model (GOCo) developed by the American Geriatric Society, was instituted on March 1, 2018 at a suburban, tertiary care academic hospital. A retrospective chart review of operative geriatric hip fractures between January 1, 2017 to July 26, 2019 on a prospectively collected database. Chronic substance users and pathologic or periprosthetic fractures were excluded. Demographics and perioperative factors were compared using Fisher's exact test, Pearson's $\chi 2$ test, and independent samples t test. Logistic regressions were used to calculate odd ratios (ORs) of complications.

Results: A total of 292 patients met the inclusion criteria; 129 were in the pre-GOCo group, and 163 were in the post-GOCo group. Time from admission to operating room and hospital length of stay was significantly decreased. There was a 10% decrease in echocardiogram, as well as decreased Foley use and urinary tract infections. Post-GOCo demonstrated a decreased likelihood of complications (OR = 0.53), which closely approached but did not reach statistical significance.

Conclusion: After initiation of this program, we improved patient outcomes and quality metrics while decreasing patient utilization costs. Our study supports the adaptation of a similar comprehensive co-management system in other hospitals to improve patient care and save resources.