Paper - Annual Meeting

Paper Session: RCT and Other
Prospective Studies I

Fascia Iliaca Block Decreases Hip Fracture Postoperative Opioid Consumption: A Prospective Randomized Controlled Trial

Jeffrey Thompson DO*; David Galos MD; Mitchell Long DO; Charles J Ruotolo MD; Rhyne Champ Dengenis DO*
Nassau University Medical Center, Hempstead, NY, United States

Purpose: Adequate pain control, an essential aspect of recovery in geriatric hip fractures, is challenging due to medical comorbidities and physiologic changes in end organ function. This study sought to determine the efficacy of a preoperative fascia iliaca compartment block (FICB) in decreasing postoperative pain and improving functional recovery following hip fracture surgery.

Methods: Patients at an academic Level-I trauma center were prospectively randomized into an experimental (Group A) or control (Group B) group. Along with our institution's standardized postoperative pain regimen, Group A also received an ultrasound-guided FICB prior to anesthesia. The primary outcome measure was postoperative pain medication consumption until postoperative day 3. Secondary outcomes included functional recovery and a study-specific patient-reported satisfaction survey assessed on postoperative day 3.

Results: 23 patients were allocated into each group without significant differences in age, gender, facture pattern, or surgical procedure. There was no significant difference in consumption of acetaminophen for mild pain, tramadol consumption for moderate pain, or functional recovery between the 2 groups. For severe pain, Group A consumed an average of 0.4 mg morphine relative to 19.4 mg in Group B ($P = 0.05$). The patient-reported satisfaction survey demonstrated a statistically significant 31% increase in Group A compared to Group B (23.6 vs 17.9; $P = 0.01$).

Conclusion: Preoperative FICB significantly decreases postoperative opioid consumption while improving patient satisfaction.