

### **Impact of Fascia Iliaca Block on Pain Outcomes and Opioid Consumption for Hip Fracture Patients: A Prospective, Randomized Study**

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**Purpose:** Hip fractures are a common injury among the elderly. Injury to this population leaves them vulnerable to substantial morbidity and mortality. The cornerstone of perioperative pain management for hip fractures is typically opioid medications. Retrospective studies for hip fractures and extrapolation from high-level arthroplasty studies suggest that regional nerve blockade is an option for decreasing opioid use among those with hip fractures. Our objective was to perform a prospective, randomized study to validate the efficacy of a fascia iliaca block (FIB) on pain, opioid use, and function after operative treatment of hip fractures.

**Methods:** A single-center, prospective, randomized controlled study of patients between 18-99 years old treated operatively in 2018 through January 2019 for femoral neck, intertrochanteric, or subtrochanteric hip fractures was performed at a Level-I trauma center. Patients were randomized to either receive the block or not to receive the block based on medical record number (MRN). Polytrauma patients, pathologic fractures, revision procedures, and patients with dementia were excluded. Primary outcomes were the morphine equivalent dose (MED) of opiate consumption, visual analog scale (VAS) scores, postsurgical 72-hour ambulatory distance, block-associated complications, and the length of stay (LOS). Secondary outcomes were postoperative complications and the discharge disposition.

**Results:** 85 patients (n = 48, block) with a mean age of 77 years were included. Demographics, fracture type, and disposition at discharge were similar. While there was no difference in VAS scores, the study group demonstrated decreased opiate use (MED 62.3 vs 107.5, P = 0.07). The block group trended toward greater postoperative day 3 walking distance (30' vs 9', P = 0.07) and 72-hour cumulative walking distance (70' vs 27', P = 0.08). Patients with a block trended toward a decreased LOS (5 days vs 6 days, P = 0.16).

**Conclusion:** Preliminary data from our Level-I study suggest adjuvant FIBs to multimodal postoperative pain regimens for patients with hip fractures may decrease the amount of narcotic consumption in the postoperative period and allow for increased postoperative mobilization.