

MAINE MEDICAL CENTER
DEPARTMENT OF EMERGENCY MEDICINE

Journal Club / Research Article Summary

9/18/2013

Summary by Tony Owens, MD ; presented by Brent Fowler, MD

Fascia Iliaca Compartment Blockade for Acute Pain Control in Hip Fracture Patients
Nicolai Foss, MD, et. Al

Denmark

Funding not disclosed

Research Question: Comparison in a randomized fashion of opiates vs. FICB in hip fracture patients

Hypothesis: Not stated

Design: Randomized, controlled, double blinded, prospective

Outcome variables; Primary 10 VRS (verbal ranking score), Secondary VS, pain at rest, pain with movement, sedation, and nausea at 30, 60 and 180 minutes

Research setting; hospital emergency department, Department of Anesthesia, convenience sample (when research participant was on call)

Subjects and inclusion criteria: patients presenting to ED with clinical signs of hip fracture, cognitively intact and able to consent

Exclusion criteria: refusal, previous hip surgery, prior opiate/glucocorticoid use, alcohol or substance abuse, infection at site, morphine intolerance, negative hip x-ray

Patients; 48, randomized by computer into two groups of 24; groups were well matched with the exception of sex; the placebo (morphine) group was predominantly female 21 versus 14.

Interventions: Group A received the block and placebo injection, Group B received morphine (5 mg) and placebo block, both received paracetamol 1 gm po

Investigators collected data, but were blinded as to drug versus placebo

Data; Categorical and Continuous

Statistics: chi-square for categorical, Whitney-Mann for continuous, and Student *t* test for normally distributed categorical data

Findings: FICB showed improvement in pain scores at rest and with 15 degrees of elevation over morphine IM. Other variables, nausea, vomiting were unchanged and there was a trend to lower O2 sats in the opiate group. Success of the block was only 67% and attributed to lack of experience.

Implications for practice; This is relevant to MMC where approximated 330 patients annually present with hip fracture. The procedure is brief (avg 4 minutes) and could be augmented with US guidance. Drugs were inexpensive (mepivacaine) but relatively short acting. Time to OR at MMC averages 19 hours after arrival. Bupivacaine or ropivacaine might be alternatives. There was no discussion about provision for local anesthetic reactions (Intra-lipid) or its costs.

Level of Evidence: This procedure is already in use, often with US guidance and long acting LA. It is currently in use at MMC for preoperative analgesic for total knee replacement and its safety established.

Evidence Ib Evidence obtained from at least one RCT