Randomized, Placebo-Controlled, Double-Blind Clinical Trial in 49 Patients

- PMID: 30538796
- PMCID: PMC6257902
- DOI: 10.1155/2018/6398424

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Abstract

Background and purpose: Local infiltration analgesia (LIA) supports early mobilization after hip and knee arthroplasty. Inspired by this, we studied the effectiveness of wound infiltration with the long acting local anesthetic ropivacaine in an effort to decrease the need for postoperative opioids after osteosynthesis of extracapsular hip fracture.

Methods: Forty-nine patients undergoing osteosynthesis with a sliding hip screw were randomized into two groups in a double-blind study (ClinicalTrials.gov:NCT01119209). The patients received intraoperative infiltration followed by 6 postoperative injections through a wound catheter in eight-hour intervals. 23 patients received ropivacaine and 26 received saline. The intervention period was 2 days, and the observation period was 5 days. In both groups, there were no restrictions on the total daily dose of opioids. Pain was assessed at specific postoperative time points, and the daily opioid usage was registered.

Results: Intraoperative infiltration with 200 mg ropivacaine and postoperative repeated infiltration with 100 mg ropivacaine did not result in statistically significant difference between the groups regarding postoperative opioid consumption or pain.

Interpretation: Ropivacaine as single component in postoperative treatment of pain after hip fracture is not effective. In our setup, wound infiltration with ropivacaine is not statistically significantly better than placebo.

Local anaesthetic wound infiltration after internal fixation of femoral neck fractures: a randomized, double-blind clinical trial in 33 patients

- PMID: 21484739

  DOI: 10.5301/HIP.2011.6513

Abstract

Pain control may assist early mobilisation after internal fixation of femoral neck fractures. Systemic opioids have significant side effects in elderly patients. We present an evaluation of the effect of local anaesthetic infiltration in such cases , the objective being to decrease the need for postoperative opioids and to improve pain control for patients after surgery. 33 patients undergoing internal fixation with 2 parallel hook pins were randomized into 2 groups in a double blind study (ClinicalTrials.gov: NCT00529425). 33 patients received intraoperative infiltration followed by 6 postoperative injections through an intraarticular catheter in eight-hour intervals. 19 patients received ropivacaine and 14 received saline. The intervention period was 48 hours and the observation period was 5 days. In both groups there were no restrictions on the total daily dose of rescue analgesics. Pain was assessed at specific postoperative time-points and the daily consumption of opioid drugs needed for analgesia was registered. There was no significantly reduced consumption of standardized opioid rescue analgesics or pain in the study group receiving ropivacaine injections. Apart from a reduction in nausea in the study group on the second postoperative day, there were no significant differences in the occurrence of side effects between the groups. On day 2 the placebo group had less pain than the study group. Local anaesthetic infiltration after fixation of femoral neck fractures does not reduce opioid consumption or pain'.