PubMed

NCBI is currently redirecting web traffic to HTTPS. Read more about our https testing.

Full text links
ELSEVIER OPEN ACCESS

Format: Abstract

Orthop Traumatol Surg Res. 2013 Apr;99(2):169-74. doi: 10.1016/j.otsr.2012.08.007. Epub 2012 Dec 21.

# Nefopam after total hip arthroplasty: role in multimodal analgesia.

Remérand F[1], Le Tendre C, Rosset P, Peru R, Favard L, Pourrat X, Laffon M, Fusciardi J.

**Author information**

## Abstract

**BACKGROUND:** Multimodal analgesia combining several non-opioid analgesics is recommended for pain control after surgery. In one study of total hip arthroplasty (THA), pain relief achieved by adding ketamine to the paracetamol-ketoprofen combination was statistically significant but remained inadequate in most patients. In two other studies, the analgesic effect of nefopam was synergistic with that of ketoprofen and additive with that of paracetamol. Adding nefopam to the paracetamol-ketoprofen-ketamine combination has not been evaluated.

**HYPOTHESIS:** Adding nefopam to the paracetamol-ketoprofen-ketamine combination significantly improves analgesia after THA.

**MATERIAL AND METHODS:** A prospective single-centre comparative non-randomised study (control group then nefopam group) was conducted in patients undergoing THA under general anaesthesia. All patients received paracetamol-ketoprofen-ketamine and morphine/droperidol patient-controlled analgesia. The nefopam group also received a continuous infusion of nefopam (120 mg/d for 48 h). Pain was evaluated daily for 7 days. The main evaluation criteria were morphine consumption, and pain intensity evaluated using a numerical rating scale and a validated questionnaire. To detect a 40% morphine-sparing effect by H24 ($\alpha$=0.05 and $\beta$=0.2), 85 patients were needed in each group.

**RESULTS:** The two groups (90 patients/group) had no significant differences for perioperative characteristics, pain scores, morphine consumption at H24 (nefopam, 13 ± 12 mg and control, 14 ± 13 mg, P=0.39), or functional recovery. Compared to the control group, the nefopam group had lower rates of nausea/vomiting (P<0.0001), pruritus (P=0.002), and visual disturbances (P=0.02).

**DISCUSSION:** Nefopam failed to improve pain relief when added to a multimodal analgesia regimen but alleviated several morphine-induced side effects. Redundancy between nefopam and ketamine may explain the absence of greater pain relief. This study emphasises the need for clinical evaluations of every analgesic regimen, as the available data were not sufficient to predict these results.

**LEVEL OF EVIDENCE:** Level III, case-control study.

Copyright © 2012 Elsevier Masson SAS. All rights reserved.

PMID: 23265837 DOI: 10.1016/j.otsr.2012.08.007

[PubMed - indexed for MEDLINE] Free full text

**MeSH Terms, Substances**

**LinkOut - more resources**

## PubMed Commons

PubMed Commons home

0 comments

How to join PubMed Commons