

Postoperative analgesia following elective abdominal surgery: a prospective observational study

Abstract

Background: Laparotomy forms an important subset of general surgical operations. This study aimed at collecting the baseline information on postoperative analgesia, to detect deficiencies in current management of postoperative pain and to aid as a reference for future endeavours aimed at improving pain management following abdominal surgeries.

Methods: It was conducted as a prospective descriptive study in patients undergoing elective laparotomies in the Department of General Surgery of a tertiary care institute, for two years. The patterns of prescription and administration of analgesic drugs for postoperative pain after abdominal surgery, incidence and severity of postoperative pain, adverse effects of drugs and patient satisfaction were assessed.

Results: A total of 289 elective laparotomies were performed. Combinations of Non-steroidal anti-inflammatory drugs (NSAID) with opioids, epidural analgesia (EA) with supplemental intramuscular ketorolac and PCEA (Patient controlled EA) provided effective pain relief with high satisfaction score (3/4) and were associated with low sedation (1/3) and the least side effects. Patients receiving NSAIDs had higher pain score with lesser satisfaction score and lower sedation score. IV-PCA with morphine provided effective pain relief with high satisfaction score (3/4), with least side effects, but patients had high sedation score (2/3). Around 55 (55/289; 19.03%) patients experienced postoperative nausea and vomiting, which responded to antiemetic treatment.

Conclusions: A combination of NSAIDs with opioids provided effective pain relief, high satisfaction with less sedation and least side effects. Epidural analgesia with supplemental intramuscular ketorolac and PCEA also provided effective pain relief with high satisfaction and less sedation with least side effects.