

Efficacy of single and combination analgesics (ibuprofen, paracetamol and ibuprofen, and paracetamol and d-propoxyphene) after hysterectomy; a comparative study

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Introduction

Adequate analgesia during the postoperative period is an essential component of perioperative care. Ineffective postoperative pain management can result in increased perioperative morbidity and mortality. In many cases, large doses of opioids are used. Although very effective, these drugs have many undesirable side effects. The search for the ideal perioperative analgesic regime is ongoing.

Aim

The aim of our study was to compare combination therapy (paracetamol and ibuprofen or paracetamol and d-propoxyphene) with a single agent (ibuprofen) in relieving pain after abdominal hysterectomy. We hoped that these oral preparations would reduce the need for parenteral opioid analgesia.

Method

Adult patients between 18 and 65 years of age who underwent abdominal hysterectomy for non-malignant causes were randomised to receive one of the three analgesic regimes mentioned above. The study medication was administered one hour preoperatively and then every eight hours for three days postoperatively. All the patients received a morphine PCA pump during the first 24 hours after surgery. The patients were then asked to record, at regular intervals, their pain intensity using the visual analogue scale (VAS). Pulse rate, blood pressure, respiratory rate, nausea or vomiting, level of sedation and amount of morphine used in 24 hours were also recorded.

Results

To date, 30 of the proposed 60 patients have been recruited. A pre-

liminary data analysis was done using the Fischer exact method and a one-way analysis of variance (ANOVA). The treatment groups were compared with respect to mean pain intensity at rest and on movement within the first 24 hours postoperatively. The average pain intensity at rest in each group was 5.39, 4.3 and 5.3 out of 10 using the VAS. The average pain intensity on movement in each group was 7.22, 5.9 and 7.07. Therefore, with regard to pain intensity the groups did not differ significantly ($p=0.4116$ and $p=0.312$).

When comparing the amount of morphine used in the first 24 hours postoperatively and the occurrence of opioid-related side effects, no significant difference was found.

The average amount of morphine used by each group was 50.8 mg, 58 mg and 50 mg respectively. None of the patients experienced significant hypotension or respiratory depression requiring treatment. The incidence of nausea within the three groups was the same (33%) and the maximum level of sedation did not differ significantly ($p=0.4469$).

Conclusion

Although these are provisional statistics and conclusive results will follow on completion of the trial, it would appear that there is no difference in the efficacy of combination therapy versus single-agent therapy in the relief of postoperative pain following abdominal hysterectomy. Secondly, there is no difference in the amount of opioid analgesia required by the patients and therefore in opioid-related side effects between the subjects receiving combination versus single-agent therapy.