

Patients-controlled intravenous versus epidural analgesia after major joint replacement. 1992;30: 71-77.

陳大樑

Peng WL;Wu GJ;Sun WZ;Fan SZ;Chen TL;Huang FY

摘要

Abstract

The analgesic efficacy, side effects, and satisfaction of patient-controlled analgesia (PCA) with intravenous and epidural morphine for postoperative pain were evaluated in this study. Twenty patients undergoing major joint replacement surgery were randomly allocated to intravenous PCA (IPCA) group or epidural PCA (EPCA) group. All patients had a standardized balanced anesthesia, and an epidural catheter was introduced after the operation in EPCA group. Postoperative pain relief was evaluated with verbal pain scale. The result showed that pain intensity and pain relief were similar in either group without significant difference (p greater than 0.05). Morphine consumption in IPCA group was 1.72 ± 0.30 mg/h in the postoperative 0 - 12 h and 1.14 ± 0.44 mg/h in 12 - 24 h. In EPCA group, relatively low doses of morphine were used, i.e., 0.20 ± 0.07 mg/h in the postoperative 0 - 12 h and 0.17 ± 0.07 mg/h in 12 - 24 h. Both groups showed an "incomplete" but satisfactory analgesia with relatively low doses of morphine. The "equianalgesic dose ratio" of IPCA to EPCA with morphine was approximately 8.5:1. Sedation was minimal in both groups. No respiratory depression developed in all patients. Nausea and vomiting were the most prominent side effects which might limit the usefulness of PCA. The incidence was 5 out of 10 patients in IPCA group and 4 out of 10 patients in EPCA group, despite under the treatment of droperidol (15 micrograms/kg, iv, prn) for most of the patients.(ABSTRACT TRUNCATED AT 250 WORDS)