

Randomized Study of the Effects of pregabalin on Postoperative Morphine Consumption after OPCAB

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Background. Pain after cardiac surgery may be severe and limit patient recovery. Traditionally, pain treatment after cardiac surgery is opioids intravenously. However, there is a recent interest in advanced techniques of pain control including multimodal analgesia is needed for acute postoperative pain management due to adverse effects of opioid analgesics, which can impede recovery. Pregabalin has analgesic effect on acute postoperative pain and significantly reduce the incidence of opioid-related side effects. Therefore, the authors investigated the effects of pregabalin on acute postoperative pain and morphine consumption in patients undergoing OPCAB (Off Pump Coronary Artery Bypass)

Methods. After standard premedication with 7.5 mg oral midazolam and 0.1 mg/kg morphine intramuscularly. 35 patients in the control group received oral placebo, and the 35 patients in the pregabalin group received 150 mg oral pregabalin 2 h before surgery. Anesthesia was induce with midazolam, fentanyl and rocuronium and was maintained with sevoflurane. The visual analogue score (VAS) for pain at rest, pain during mobilization, postoperative morphine consumption and side effects were recored for 48 h after surgery.

Result. The VAS score at rest were significantly lower in the pregabalin group compared with the control group at any of measurement intervals. The VAS score during mobilization were significantly lower in the pregabalin group compared with the control group at 36, 48 postoperatively. The 48 h postoperative morphine consumption was not significantly different between groups. The incidence of nausea, somnolence, lightheadedness, dizziness were significant lower in the pregabalin group. Other side-effects were not different between groups.

Conclusion. A single pre-operative dose of pregabalin 150 mg in patients undergoing OPCAB resulted in significant reduction in postoperative pain score at rest and during mobilization but not reduced morphine consumption in 48 h postoperatively.