Comparation of effectiveness of intravenous Acetaminophen and Ketorolac with Fentanyl pump for post-cesarean pain control after spinal anesthesia

Abstract

Background: *Postoperative pain as one of the most common problems in the postoperative phase* of *surgery especialy in cesarean section and can lead to a significan reduction in the quality of surgical operations, along with other problems such as nausea and vomiting, hypotension and shivering.*

Aim: *Therefore, the present study we aimed to compare of effectiveness of intravenous Acetaminophen and Ketorolac with Fentanyl pump for post-cesarean pain control after spinal anesthesia.*

Methods: *In this clinical trial study, 100 pregnant women with cesarean section andication who underwent cesarean section and spinal anesthesia were enrolled. After obtaining patient consent, patients were randomly divided into two groups of 50 each. Patients in group one recived fentanyl pump (20 cc fentanyl with 80 cc normal saline in total volume of 100 cc by pain pump) and patients in group two recived intravenous acetaminophen and ketorolac (three grams of apotel in 30 mg of ketorolac in total 100 cc normal saline). By the pain pump. VAS scores, at 2, 6, 12 and 24 hours after intervention, nausea and vomiting score, sedation score (via Ramsey's sedation scale), and need for analgesia were assessed. Finally, the data were analyzed by SPSS.*

Results*: VAS score analysis showed that there was significant difference between the two groups at 6 and 24 hours after surgery. The analgesic use was not significant between the two groups. The score of nausea and vomiting was significantly lower in the paracetamol and ketorolac group than in the fentanyl group. There was no significant difference between two groups regard to mean sedation score. Sleepiness was significantly higher in the fentanyl group than in the paracetamol and ketorolac groups. Also, gastric pain was more in paracetamol and ketorolac group than fentanyl group. The mean systolic and*

diastolic blood pressure, heart rate and respiratory rate after intervention were statistically significant in the two groups in all cases.

Conclusions: *The results of the present study showed that the efficacy of intravenous acetaminophen and ketorolac in controlling post-cesarean pain was similar and in some hours better than fentanyl pump and had less side effects than fentanyl. Therefore, these drugs can be used to reduce the pain and complications of cesarean section.*

Key words: *Acetaminophen, Ketorolac, Fentanyl, post-cesarean pain control*