The effects of the combination of tranexamic acid and diclofenac on pain and post-operative bleeding in patients undergoing spinal anesthesia for cesarean

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Abstract:

Background: Control of the pain and bleeding after cesarean can reduce postoperative complications and increase the ability of the mothers to optimize the care for their babies. The aim of this study was to investigate the role of tranexamic acid in combination with diclofenac in decreasing blood loss and pain after cesarean section.

Materials and Methods: In this clinical trial, 210 women undergoing cesarean were divided into 3 groups: the first group received tranexamic and diclofenac suppository; the second group tranexamic and placebo suppository and the third group diclofenac suppository and 2 mL of normal saline injection. The time for first need of analgesia, the analgesic dose 24 hours after surgery and the net amount of bleeding were measured and also hemoglobin measured 12 hours after surgery were compared with the pre-operative Hb.

Results: There was a significant difference in analgesic consumption among the groups received tranexamic, diclofenac and both drugs. Also, the analgesic consumption in the group received tranexamic was higher than the other groups. Moreover, the time to first analgesic request in the tranexamic group was shorter than the other two groups and the amount of bleeding in the diclofenac group was higher than the other two groups, this difference was statistically significant. However, no significant difference was seen between the groups in mean hemoglobin.

Conclusion: Combined tranexamic acid and diclofenac can reduce the amount of blood loss and pain after cesarean.

Keywords: Tranexamic acid, Diclofenac, Bleeding, Pain, Cesarean