The effect of adding epinephrine to combination of sufentanil and bupivacaine in spinal analgesia during labor

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Abstract

Background: Spinal analgesia is one of the effective and rapid methods for labor. It is not commonly used because of short duration of analgesia and motor block, which limits mother’s force in labor progression. We attempted to prolong duration and quality of analgesia by adding Epinephrine.

Methods: In this quasi-experimental study 90 pregnant women gravid II and III who referred to Motazedi and Imam Reza Educational & Medical Centers were recruited and divided into two groups of case and control (45 subjects in each group). The case group received spinal analgesia using Sufentanil and Bupivacaine, and Epinephrine while the control group received Sufentanil and Bupivacaine. Data including feeling of pain, motor block, duration of analgesia, fetal heart rate, nausea and vomiting, blood pressure was collected and analyzed using chi-square and t test.

Results: duration of analgesia and vomiting were significantly increased in the case group. (p=0.001, p=0.01 respectively). Hemodynamic status in mothers and Apgar score of neonates were not significantly different between two groups.

Conclusion: It seems that adding Epinephrine to Sufentanil and Bupivacaine could increase analgesia duration without altering in sensory level although could increase nausea and vomiting its recommended in labor analgesia.

Key words: epinephrine, bupivacaine, sufentanil, labor analgesia, spinal.


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References