



THE EFFECTIVENESS OF CELECOXIB FOR PAIN RELIEF AND ANTIPYRESIS IN SECOND TRIMESTER MEDICAL ABORTIONS WITH MISOPROSTOL: A RANDOMIZED CONTROLLED TRIAL

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Context: Misoprostol is commonly used for second trimester abortions. Sublingual administration is more convenient and provides a higher serum level than the transvaginal route but also has more side effects, especially pain and fever. There is no standard pain control method recommended for medical abortion, but studies have found that celecoxib is more efficacious compared with conventional NSAIDs and is also an antipyretic.

Objective: To determine the effectiveness of celecoxib for pain relief and antipyresis during second trimester abortion using sublingual misoprostol.

Methods: Double-blind randomized controlled trial.

Patients: Pregnant women who underwent a second trimester medical abortion.

Interventions: 56 pregnant women of gestational age 14-24 weeks were randomly assigned to receive celecoxib 400 mg or placebo after misoprostol 400 µg sublingually every 6 hours was begun.

Main Outcome: Pain and body temperature (BT).

Measures: Pain and BT were assessed every 1 hour until the abortion or 24 hours after the first dose of misoprostol. Pain was assessed using a 10 cm visual analog scale (VAS). BT was measured with an infrared thermometer.

Results: There were 28 patients assigned to each group. The overall mean pain score in the celecoxib group was significantly lower than in the placebo group (-0.51 [SD = 0.15] P-value < 0.001). The mean VAS pain score at the abortion time in the celecoxib group was also significantly lower than in the placebo group (4.6±2.8 vs. 7.3±2.2, P-value = 0.012). The overall mean BT in the celecoxib group was significantly lower than in the placebo group (-0.09 [SD=0.04] P-value = 0.017). The mean BTs at 1, 2 and 6 hours after each repeated dose of misoprostol in the celecoxib group were also significantly lower than in the placebo group.

Conclusions: Celecoxib had a significant beneficial effect on pain relief and antipyretic effect during second trimester abortions using sublingual misoprostol.

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