

## **Misoprostol for intrauterine device insertion in nulliparous women: a randomized controlled trial.**

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**OBJECTIVE:** To examine the effects of preprocedure misoprostol on intrauterine device (IUD) placement in nulliparous women.

**STUDY DESIGN:** In this randomized controlled double-blind trial at the University of New Mexico reproductive health clinic, nulliparous women requesting an IUD were randomized to 400 mcg of buccal misoprostol or placebo 2-8 hours before insertion. Primary outcomes included pain on a 10-cm visual analog scale and women's perception of the value of delaying insertion for an effective medication. Provider ease of insertion and need for adjunctive insertion measures were also assessed, on a visual analog scale. Participants indicated maximum pain after IUD insertion, pain level they would tolerate to avoid delay in IUD insertion, and preference for IUD insertion without delay if an effective medication was available.

**RESULTS:** Of 85 women enrolled, 3 were ineligible; 42 were randomized to misoprostol and 40 to placebo. There were no differences between groups in worst insertion pain, ( $5.8 \pm 2.0$  vs  $5.9 \pm 2.0$ ,  $P = .94$ ), provider ease of insertion ( $2.2 \pm 2.2$  vs  $2.5 \pm 2.2$ ;  $P = .54$ ) or adjunctive measures (14% vs 25%;  $P = .27$ ). The groups were willing to tolerate the same mean pain ( $4.9 \pm 2.5$  vs  $5.7 \pm 2.4$ ,  $P = .18$ ) to avoid waiting for medication. The majority of women (85%) preferred to wait for an effective medication.

**CONCLUSION:** Misoprostol for nulliparous women did not decrease pain or improve the ease of insertion of an IUD. Most women were willing to wait for a medication that decreases pain, indicating a need to pursue alternatives for pain control with IUD insertion.

### **CAS Registry / EC Numbers**

- 0 (Analgesics)
- 0E43V0BB57 (Misoprostol)

### **Minor Subject Heading(s)**

- Adolescent
- Adult
- Analgesics [administration & dosage] [therapeutic use]
- Double-Blind Method
- Female
- Humans
- Intrauterine Devices
- Mexico
- Misoprostol [administration & dosage] [therapeutic use]
- Pain [drug therapy]
- Pain Measurement
- Patient Satisfaction/Treatment Outcome