

## **Summary**

Misoprostol is used off-label for a variety of indications in the practice of obstetrics and gynecology, including medication abortion, medical management of miscarriage, induction of labor, cervical ripening before surgical procedures, and the treatment of postpartum hemorrhage. Misoprostol effects are dose dependent and include cervical softening and dilation, uterine contractions, nausea, vomiting, diarrhea, fever, and chills (*Goldberg et al., 2001*).

Although misoprostol is not approved by the US Food and Drug Administration (FDA) for these indications, in 2002, pregnancy was removed from the label as an absolute contraindication to misoprostol Use (*ACOG 2003*).

Misoprostol's advantages over other synthetic prostaglandin analogues are its low cost, long shelf life, lack of need for refrigeration, and worldwide availability (*Tang et al., 2006*).

The uterotonic and cervical softening effects on the female genital tract were considered as side effects rather than therapeutic effects when misoprostol was first introduced. However, because of these effects that misoprostol is so widely used in obstetric and gynecological practice today.

Misoprostol is an effective drug for labor induction in the second trimester for fetal death or termination of pregnancy (*Neilson et al., 2006*). The optimal dose, schedule, and route of administration have

not been determined. Several randomized, controlled trials exist examining the different doses and schedules (*Carbonell et al., 2008*).

Although the optimal dose for fetal death or termination of pregnancy in the second trimester has not been established, a reasonable approach may be to start with 400 µg vaginally every 6 hours for a 48-hour period. There is also evidence that the addition of 200 mg of mifepristone to the induction protocol decreases the interval to delivery for termination of pregnancy (*Kapp et al., 2007*).

The doses used in many randomized trials range from 200 µg to 800 µg administered vaginally, and the interval between dosing ranged from every 3 to every 12 hours. No conclusive evidence of superiority of one dose or schedule over another can be clearly drawn from these studies.

The objective of this study was to evaluate two regimens of misoprostol that by reducing the dose interval from 12 hours to 6 hours might increase abortion rate within 24 hours and reduce the induction to abortion interval.