MISOPROSTOL: CLINICAL PHARMACOLOGY IN OBSTETRICS AND GYNECOLOGY
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Outcomes from my practice's pilot study

In his recent editorial, Dr. Barbieri addressed the important topic of office-based cervical ripening prior to inpatient induction of labor. In order to decrease the length of labor and increase the success of vaginal delivery, the cervical factor is of prime importance. Patients with an unfavorable cervix (Bishop score of ≥6) are more likely to experience longer labor, risk of infection, fetal distress, etc, and may end up with an unwanted cesarean delivery. To prevent the above, numerous approaches (mechanical methods, double-balloon catheter, laminaria, misoprostol among others) have been discussed.

The inclusion criteria for office-based cervical ripening are low-risk patients, singleton pregnancies between 39 and 40 weeks of gestation, and cephalic presentation. The details of inclusion and exclusion criteria have to be determined by each practice individually. Our practice went a step further. We performed a small pilot study to assess the safety and efficacy of office cervical ripening in low-risk primigravid patients with low Bishop scores who were not scheduled for induction in anticipation of labor. Ten primigravid patients with poor Bishop scores (6 or less) were administered 50 µg misoprostol at 39+ weeks of pregnancy in the office setting. Bishop scores were taken twice per week until delivery. In 7 out of 10 patients, the Bishop score became favorable within a week of treatment, and in 3 patients the Bishop score remained the same. Three out of 10 patients experienced self-limited episodes of uterine contractility, and 2 of the patients went into labor within 3 days of using misoprostol. All patients were delivered within 2 weeks of treatment without an induction: 8 delivered vaginally, and 2 by cesarean delivery.[2]

Cesarean delivery was done for fetal distress (1 case) and prolonged second stage of labor (1 case). All neonates were born in satisfactory condition with Apgar scores between 7 and 10. Our preliminary results demonstrated marked improvement in cervical ripening judged by the Bishop score in 70% of patients.[2]

A prospective randomized study should be performed with the following agenda:

- Does late pregnancy medical cervical ripening in low-risk patients affect labor course and cesarean delivery rate?
- What is the optimal dose and route of administration of misoprostol?[3,4]

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References

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Dr. Barbieri responds

I appreciate that Dr. Petrikovsky took time from a busy practice to provide our readers with his very innovative idea. I agree with him that a clinical trial is warranted to test the effects of late pregnancy medical cervical ripening in low-risk patients on labor course and birth outcome. Maybe one of our readers will take on the challenge to complete such a trial! ●