Does an unfavorable cervix preclude induction of labor at term in women who have gestational hypertension or mild preeclampsia?

**No.** This post hoc analysis from the Hypertension and Preeclampsia Intervention Trial at Term (HYPITAT) found that, contrary to widely held belief, induction of labor at term is of significant benefit to women who have an unfavorable cervix. Expectant management (n = 379). All women were carrying a singleton fetus that was 36 to 41 weeks old, with cephalic presentation. The main findings of the trial, published in *Lancet*, were that induction of labor produced fewer “high-risk situations” (relative risk [RR], 0.71; 95% confidence interval [CI], 0.59–0.86), with no increase in the risk of cesarean delivery (RR, 0.75; 95% CI, 0.55–1.04) or adverse neonatal outcomes (RR, 0.75; 95% CI, 0.45–1.26).1

Although these findings are important, one question lingered in the minds of many clinicians: Does an unfavorable cervix preclude induction of labor at term in women who have gestational hypertension or mild preeclampsia?

No. This post hoc analysis from the Hypertension and Preeclampsia Intervention Trial at Term (HYPITAT) found that, contrary to widely held belief, induction of labor at term is of significant benefit to women who have an unfavorable cervix.

---

**What This Evidence Means for Practice**

This study provides additional evidence that induction of labor is the optimal approach to gestational hypertension or mild preeclampsia in a pregnancy at 36 weeks or beyond—regardless of cervical status. I would expect clinicians to embrace the findings of the HYPITAT trial, including the secondary analysis, and incorporate this management strategy in their practice.

**George Macones, MD**

---

**Fast Track**

The beneficial effect of induction of labor—in terms of reducing the rate of cesarean delivery—was greater in women who had an unfavorable cervix than in women who had a favorable cervix.
obstetricians: Should the choice between induction of labor and expectant management hinge on the favorability of the cervix? That is the question addressed by Tajik and colleagues.

Zooming in on cervical status
In their secondary analysis from the HYPITAT trial, Tajik and colleagues reanalyzed the association between induction of labor and expectant management, focusing on the same outcomes (high-risk situations, cesarean delivery, adverse neonatal outcomes), but they stratified their data by cervical status. As stated above, their findings are surprising and seemingly counterintuitive:

- Among women who underwent immediate induction of labor, cervical length was not associated with a higher probability of high-risk situations
- The beneficial effect of induction of labor—in terms of reducing the rate of cesarean delivery—was greater among women who had an unfavorable cervix.

Strengths and limitations of the trial
Overall, this was a well-conducted secondary analysis that tackled an important issue. It featured 1) a robust dataset, with all variables of interest collected, and 2) a thoughtful approach to data analysis.

However, the analysis also raises a question: Is it possible that some of its negative findings (composite neonatal morbidity) are due to insufficient power? This is a question I ask whenever I encounter a secondary analysis of a randomized, controlled trial. The answer here: Possibly.

Reference

Did you see these expert commentaries in recent installments of Examining the Evidence?

>>> Is the rate of progress the same for induced and spontaneous labors?
   William F. Rayburn, MD, MBA (November 2012)

>>> Does maternal exposure to magnesium sulfate affect fetal heart-rate patterns?
   John M. Thorp, Jr, MD (October 2012)

>>> Is elective delivery at 37 weeks’ gestation safe in uncomplicated twin pregnancies?
   Stephen T. Chasen, MD (September 2012)

>>> Does mediolateral episiotomy reduce the risk of anal sphincter injury in operative vaginal delivery?
   Errol R. Norwitz, MD, PhD (August 2012)

You can find them in the archive at obgmanagement.com