

When first-time mothers are induced, breaking the amniotic membrane shortens delivery time

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In a study to be presented today at the Society for Maternal-Fetal Medicine's (SMFM) annual meeting, The Pregnancy Meeting, in San Francisco, researchers will present findings that show that by performing an amniotomy on first time mothers in situations when labor has to be induced, that delivery time can be shortened by more than 10 percent.

There are many reasons that labor may need to be induced after a woman's due date. Today's study looked at whether or not performing an amniotomy early on in the labor process would shorten delivery time and whether it would cause any adverse affects.

The researchers performed a [randomized clinical trial](#). Nulliparous patients with singleton, viable pregnancies undergoing labor induction at or beyond 37 weeks were eligible for inclusion. They excluded subjects with PROM, cervical dilation > 4cm at admission, or significant vaginal bleeding.

Eligible subjects were randomized to early amniotomy (AROM at \leq 4cm) or standard management (AROM at > 4cm). Outcomes for this study included duration of labor, % delivered within 24 hours, cesarean rate, maternal infectious complications, and measures of neonatal outcome. A priori sample size was based on the proportion of subjects delivered within 24 hours of randomization.

The study randomized 585 subjects into the clinical trial, 292 into early amniotomy group and 293 into the standard management group. Baseline demographics at randomization, cervical dilation at admission, and methods of induction were similar between the groups. Early amniotomy shortened the time from randomization to delivery by over 2 hours ($p=0.04$) and increased the proportion of subjects delivered within 24 hours of randomization.

The study found that by doing an early amniotomy, you can shorten the time to delivery by over 10 percent, and increase the likelihood of delivery within 24 hours without adversely impacting maternal or neonatal well-being.

"I think this offers the first bit of evidence that shows that by performing an amniotomy early in labor, you can shorten [labor](#) time by a significant amount with no ill effects to the mother or baby," said George Macones, M.D., one of the study's authors. "This greatly increases the comfort of the mother."

Provided by Society for Maternal-Fetal Medicine

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