Induce Labor or Wait for the Baby?

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Labor induction linked to reduced C section rate when compared to waiting and watching

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Some women need a C-section to give birth without risking their health or the health of their baby. If it's not medically required, most women and doctors try to avoid C-sections. So how does inducing labor affect C-section risk?

A recent study reviewed previous studies that compared labor induction to watching women until they went into labor on their own or needed to be induced for medical reasons.

Labor induction occurs when a woman is given medication, usually one called pitocin, to start labor before her body begins it on its own. A C-section, or cesarean section, is a surgery to deliver a baby.

This study found that inducing labor was actually linked to a slight decrease in the risk of getting a C-section. Women were less likely to need a C-section if they were induced instead of waiting to see how their labor progressed on its own.

"Attend all prenatal appointments."

The study, led by Stephen Wood, of the Department of Obstetrics and Gynecology at the University of Calgary in Canada, looked at whether inducing labor increased the risk that a woman would get a C-section. The results from research on this topic have been mixed, so the authors analyzed the results of randomized, controlled trials on labor induction compared to "expectant management." During expectant management, a woman is not induced. Instead, she is watched by the medical staff to see how the final stages of her pregnancy progresses before further medical action is taken.

A search of three large research databases revealed 37 randomized, controlled trials. Of these, 27 involved women with no pregnancy complications going into labor between 37 and 42 weeks of pregnancy. The other 10 compared induction and expectant management in women who had various complications.

The trials dealt with one of the following: suspected oversized baby, diabetes, twins, low levels of amniotic fluid, growth restriction of the baby, high blood pressure caused by pregnancy and an already high risk for C-section.

Not all the trials used the same methods to induce the women, and the C-section rates varied from 1 percent to 47 percent across the trials. Among the women in the expectant management groups in the trials, anywhere from 4 percent to 50 percent ended up needing their labor to be induced, depending on the study.

After eliminating studies that did not have enough information, the researchers analyzed the results of 31 trials that included 6,248 women who were assigned to be induced and 5,918 women who were assigned to expectant management. This analysis revealed that inducing women whose water had not yet broken led to a small drop in their risk of getting a C-section.

The reduced risk of C-section following induction showed up when all the trials were analyzed together, in the analysis of only trials with pregnancy complications and in the analysis of only the studies that used high-quality methods.

The analysis did not reveal any other differences in the outcomes of the mothers or the babies between the women assigned to induction compared to the women undergoing expectant management. The induction group had a slightly smaller number of babies who died compared to the expectant management group, but the difference was so small that it could have been due to chance.

"Induction of labor in women with intact membranes reduces the risk of caesarean section," the researchers wrote. "Review of the trials suggests that this effect may arise from non-treatment effects, and that additional trials are needed."

Ronald de la Peña, MD, an OB/GYN at Los Robles Hospital in Thousand Oaks, California, and a dailyRx expert, said this study was well done and is helpful.

"Often, my patients say they want to avoid induction of labor because they've heard there is a higher chance of having a cesarean than compared to labor that begins spontaneously, or 'naturally'," Dr. de la Peña said. "Most patients cite hearsay, something they've read or news reports as their evidence."

He said studies like this can help explain to patients what the actual risks are, and aren't.

"It is helpful to explain that contemporary studies have shown that inducing labor has less risk of a cesarean than watchful waiting," Dr. de la Peña said. "This information will be a useful reference for patients who are looking to be more informed as to the process of initiating labor and the outcome."

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