

Inducing labor at 39 weeks reduces likelihood of C-sections

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Inducing labor in healthy first-time mothers in the 39th week of pregnancy results in lower rates of cesarean sections compared with waiting for labor to begin naturally at full term, according to a multicenter study funded by the National Institutes of Health (NIH).

Additionally, infants born to [women](#) induced at 39 weeks did not experience more stillbirths, newborn deaths or other major health complications.

"This study is a potential game changer and will have a significant impact on the practice of obstetrics," said senior author, George Macones, MD, head of the Department of Obstetrics and Gynecology at Washington University School of Medicine in St. Louis. The study was conducted through the Maternal-Fetal Medicine Units Network, which is supported by the NIH's Eunice Kennedy Shriver National Institute of Child Health and Human Development. Macones chairs the network.

"The concern has been that inducing labor—even at 39 weeks—would increase the cesarean section rate and health problems in newborns," said Macones, Washington University's Mitchell and Elaine Yanow Professor. "We found inductions at 39 weeks lowered, not raised, the number of deliveries by cesarean section."

The findings are published Aug. 9 in *The New England Journal of Medicine*.

Delivering by [cesarean section](#) generally is considered safe for mother and baby. However, the procedure involves major surgery and, therefore, poses increased complication risks and longer recovery times for mothers compared with women who deliver vaginally.

Previous studies have shown that inducing labor without medical reason before pregnancies are full-term at 39 weeks poses health risks for newborns, primarily because the lungs, brain and other organs haven't fully developed. But inductions at 39 weeks—one week before a woman's due date—has become more common in recent years, and the researchers wanted a better understanding of the risks and benefits to mother and baby.

"Our department already is recommending induction at 39 weeks for healthy pregnant women," said Macones, who treats patients at Barnes-Jewish Hospital. "Some women prefer to schedule an induction because it allows them to plan ahead. Of course, women without pregnancy complications can choose how they want to experience labor and delivery, and we respect their wishes."

The study enrolled about 6,100 healthy, first-time mothers-to-be at 41 hospitals belonging to the Maternal-Fetal Medicine Units Network. About half of the pregnant women were randomly assigned to labor induction at 39 weeks, while the other half waited for labor to begin naturally. Some women in the latter group were induced after 39 weeks for medical reasons.

Of those who were induced at 39 weeks, 569 (18.6 percent) had cesarean sections compared with 674 women (22.2 percent) who delivered by cesarean after waiting for labor to occur naturally—a difference that is statistically significant.

Other health benefits experienced by women in the induced labor group included reduced rates of pregnancy-related hypertension and postpartum infections. Specifically, 277 (9.1 percent) women induced at 39 weeks experienced blood pressure problems and 50 (1.6 percent) contracted infections after delivery, compared with 427 (14.1 percent) and 65 (2.1 percent) in the spontaneous labor group.

Infants born to both groups of mothers had the same risks for complications such as newborn death, seizure, infection, injury and the need for infant respiratory support. Of the women in the induced labor group and the spontaneous labor group, 132 (4.3 percent) and 164 (5.4 percent), respectively, experienced birth complications that affected the babies' [health](#). The difference between the two groups is not significant.

"Our findings offer healthy, [pregnant women](#) options for [labor](#) and delivery," Macones said. "However, the choice always remains theirs."

More information: William A. Grobman et al, Labor Induction versus Expectant Management in Low-Risk Nulliparous Women, *New England Journal of Medicine* (2018). DOI: 10.1056/NEJMoa1800566 , [dx.doi.org/10.1056/NEJMoa1800566](https://doi.org/10.1056/NEJMoa1800566)

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