

The second stage of labor, defined as the interval from complete cervical dilation through delivery of the baby, is a critical period for both mother and child. A prolonged second stage is associated with adverse maternal and fetal outcomes. The two most common approaches to managing the 2nd stage of labor are immediate pushing, where women are encouraged to push with uterine contractions immediately after complete cervical dilation occurs, and delayed pushing, where the baby descends first. Both approaches are commonly used, but evidence is conflicting about which is optimal.

The current issue of JAMA has a randomized trial that compares the effects of immediate versus delayed pushing on spontaneous vaginal delivery and on maternal and neonatal morbidities. The trial included more than 2400 nulliparous women at or beyond 37 weeks' gestation who were admitted for spontaneous or induced labor [00:01:01] with neuraxial analgesia at six US medical centers. Participants were randomized when they reached complete cervical dilation. Immediate group participants were instructed to begin pushing at the time of complete cervical dilation, while delayed group participants were instructed to wait 60 minutes. The primary outcome of the study was spontaneous vaginal delivery. Spontaneous vaginal deliveries are associated with lower risks of adverse neonatal and maternal outcomes than forceps, vacuum, or C-section deliveries.

Let's review the results. The trial was stopped following a planned interim analysis after 75% enrollment because of futility and concern about increased morbidity in the delayed pushing group. Among the patients that were enrolled, spontaneous vaginal delivery occurred for 85.9% of women in the immediate group, and 86.5% in the delayed group, a difference that was not statistically significant. But statistically significant differences were observed [00:02:01] in some prespecified secondary and exploratory outcomes. Postpartum hemorrhage, chorioamnionitis, neonatal acidemia and suspected neonatal sepsis were lower in the immediate pushing group. In contrast, the rate of third-degree perineal lacerations was lower in the delayed pushing group. Women in the delayed group pushed for a mean 9.2 minutes less, but had a longer second stage of labor by about 32 minutes. The authors conclude that among nulliparous women receiving neuraxial analgesia, the timing of pushing during the second stage appears to have no effect on spontaneous vaginal delivery. They also write that the no-difference finding, combined with the evidence suggesting increased maternal and neonatal complications in the delayed pushing group, support the view that immediate pushing after complete cervical dilation may be a preferred approach to labor.