

Delivery Planning After Cesarean or Uterine Surgery

Patient Education Series

Quick Facts

- Inform your obstetric care professional provider about any previous uterine surgeries, and the details of those surgeries, to help determine the timing and route of your delivery.
- There are two basic types of uterine incisions used during cesarean deliveries: transverse and classical.
- The type of incision on your skin may not reflect the type of incision made on your uterus, which is important information for planning future deliveries.
- Transverse cesarean deliveries are common. A vaginal delivery is possible if you have had 1 or 2 prior transverse deliveries.
- A classical cesarean delivery may limit future delivery options to cesarean deliveries only.
- For those with a prior classical, T, or J cesarean incision, a repeat cesarean delivery is recommended between 36 and 37 weeks of gestation due to the increased risk of uterine rupture.
- If you have had significant uterine surgery, like a myomectomy, cesarean delivery might be recommended between 37 and 38 weeks of gestation, depending on the surgery details.
- Pregnant people with more than two previous cesarean deliveries generally have a planned cesarean delivery at 39 weeks.

If you have had a previous **cesarean delivery** or uterine surgery and are again pregnant, it is important to talk about your delivery plan with your obstetric care professional. Previous surgery involving the **uterus** increases the risk of a serious complication called **uterine rupture** during labor. Although it is often safe to consider a vaginal birth, a planned cesarean delivery is recommended as the safest option if you have had:

- More than 2 prior cesarean deliveries,
- A prior cesarean delivery with a classical (up and down), T, or J uterine incision,
- Certain types of uterine surgery to remove **fibroids** or for other reasons, or
- A previous **uterine rupture**.

Your healthcare team will need to know details about these prior uterine surgeries to recommend the safest options for delivering your baby. The following information can help you understand why this information is important and how to discuss your delivery options with your healthcare professional.

What exactly does my obstetric care professional need to know about any prior uterine surgeries I have had?

Your obstetric care professional needs to know the following information:

- The number of cesarean deliveries you have had,
- Whether you have had any other type of surgery on your uterus (for example, to remove a fibroid),
- The type of incisions that were made in your uterus during your cesarean deliveries or uterine surgeries, and
- Any complications that occurred during any of these surgeries.

This information should be available in your medical records, which your healthcare professional can help you access.

What are the different types of incisions used in a cesarean delivery?

A cesarean delivery involves two incisions: one incision in the skin of the abdomen and another incision in the uterus. The incision in the uterus can be horizontal (called a **transverse incision**), vertical (called a **classical incision**), or a combination of the two.

In most cesarean deliveries, a transverse incision is made across the lower part of the uterus to deliver the baby. The muscle tissue in the lower part of the uterus is thinner than in the middle part of the uterus, making the surgery easier and resulting in less bleeding.

In a small number of cesarean deliveries, a classical incision is made in the middle part of the uterus. This type of incision may be done when a horizontal incision isn't possible or safe. Reasons for a classical incision are to deliver a baby who is very preterm, has certain anomalies, or is not in the head-down position.

Sometimes, a low transverse incision is made initially, but for various reasons, the incision is extended to the upper part of the uterus. This results in a T incision. If the incision is extended to the upper part of the uterus along the side of the uterus, it's called a J incision.

It is important to note that the type of incision made in the skin of the abdomen is not necessarily the type made on your uterus. For instance, you may have a vertical incision on your skin but a horizontal incision on your uterus. Alternatively, you may have a horizontal incision on your skin, but a vertical incision on your uterus was made to deliver your baby safely.

What is a uterine rupture?

A uterine rupture is a major complication in which the uterus tears or opens up during labor. It typically happens in the area of a previous uterine incision. It can cause severe bleeding and potentially life-threatening complications for both the pregnant person and the baby. The bleeding may be so severe that the uterus needs to be removed to stop the bleeding (**hysterectomy**). Avoiding this serious complication is why healthcare professionals recommend a planned cesarean delivery in certain situations.

What are my delivery options after 1 prior low transverse cesarean delivery?

If you have had 1 prior low transverse cesarean delivery, you are a candidate for a **trial of labor after cesarean delivery (TOLAC)**. The risk of uterine rupture is low in this situation (0.2% to 1.5%). If you are interested in a TOLAC, discuss the risks and benefits with your healthcare professional. You also need to know whether your hospital provides TOLAC. Certain safety measures need to be in place at your hospital for TOLAC to be offered, including 24/7 obstetric and anesthesia care. You should not attempt TOLAC at home or outside of a hospital. Shared decision-making with your healthcare professional will allow you to make the best-informed decision for you and your baby.

What are my delivery options after a prior cesarean delivery with a classical, T, or J incision?

A vaginal delivery is not recommended in these situations because there is a higher risk of uterine rupture during labor. The risk of uterine rupture is as high as 4% to 9% in people with a prior classical uterine incision. A repeat cesarean delivery should be performed, ideally before labor begins. The risk of uterine rupture, however, needs to be carefully balanced against the risks of prematurity for the baby. As a general rule, it is recommended that people with a prior classical, T, or J uterine incision undergo repeat cesarean delivery at 36 to 37 weeks of pregnancy. Your healthcare professional will review your individual circumstances to determine if the timing needs to be earlier.

What are my delivery options after more than 2 prior transverse cesarean deliveries?

People who have had more than 2 prior cesarean deliveries are usually not candidates for a TOLAC because they are at increased risk for several types of complications. Rather than risk a fast surgery due to complications during labor, it is best to have a planned procedure so the provider can take their time. There is also a higher risk of bleeding during delivery, which sometimes requires a **blood transfusion**. It is often safest to be in the operating room if a blood transfusion is needed. To minimize risks, a repeat cesarean delivery is usually recommended at 39 weeks of pregnancy. An earlier cesarean delivery may be recommended at 37 to 38 weeks of pregnancy if there were complications with the earlier cesarean deliveries or if other risk factors are present.

What if I have had 2 prior low transverse cesarean deliveries, and I want to have a vaginal delivery?

The risk of uterine rupture in people with more than 1 prior cesarean delivery is between 0.9% to 3.7%. It's unclear, however, whether this risk is higher or lower

than the risk after only 1 prior cesarean delivery. In these cases, it is important to talk with your healthcare professional. Together, you can make an informed decision about the safest route of delivery for you and your baby.

What type of delivery is recommended if I have had fibroids removed?

If you have had surgery to remove fibroids from your uterus (called a **myomectomy**), it could have affected the muscle wall of your uterus. There are different ways to remove fibroids, and each surgical approach has its own risks during pregnancy. Your healthcare professional will need to know details about your surgery, including how many fibroids were removed, how big they were, and how the surgery was done (whether through small incisions or a larger one on the uterus). Of note, this usually applies only to fibroid surgeries through your abdomen; it does not apply to fibroid surgeries done through the vagina via a surgery called hysteroscopy. In general, if your healthcare professional has recommended you have a cesarean delivery because of a prior myomectomy, it is usually done between 37 and 38 weeks of pregnancy. If your myomectomy greatly impacted your uterine muscle, delivery could be recommended earlier at 36 to 37 weeks.

My uterus ruptured in a prior pregnancy, and I am pregnant again. When and how should my baby be delivered?

Pregnant people who have had a prior uterine rupture should not attempt a vaginal delivery because there is a high risk of uterine rupture, around 9%. Your provider will likely recommend a repeat cesarean delivery between 36 and 37 weeks of pregnancy.

Glossary

Cesarean delivery: A pregnancy in which the embryo implants in a previous cesarean scar in the inside wall of the uterus.

Classical incision: A vertical (up and down) incision made in the midportion of the uterus during a cesarean delivery.

Fibroids: Noncancerous growths that develop in the muscular wall of the uterus.

Hysterectomy: Surgical removal of the uterus.

Myomectomy: A surgical procedure to remove uterine fibroids.

Transverse incision: A horizontal incision across the lower part of the uterus, commonly used during cesarean deliveries.

Trial of labor after cesarean (TOLAC): An attempt to have a vaginal delivery after a prior cesarean delivery

Uterine rupture: A serious condition where the uterus tears during pregnancy or childbirth, often related to previous surgical incisions.

Uterus: The organ in which the fetus develops during pregnancy.

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