



Timing a Cesarean in Patients Who Have Had Uterine Surgery or a Prior Cesarean Delivery

Does my obstetric provider need to know about any previous surgeries to decide on the timing of my delivery? What types of incisions are typically used?

Two basic types of incisions are used during cesarean deliveries: transverse and classical. If you have had a cesarean delivery in the past, your obstetric provider will need to know about the type of delivery and if there were any complications.

In most cesarean deliveries, the provider makes a horizontal incision across the lower part of the uterus to deliver the baby. This type of incision is called a transverse hysterotomy. The muscle tissue of the lower uterine segment is thinner than in the midportion of the uterus, making the surgery easier and resulting in less blood loss for the mother. Women who have had a transverse hysterotomy will often have the option of vaginal delivery in future pregnancies.

Some cesarean deliveries, however, involve a vertical (up and down) incision in the midportion of the uterus; this is called a classical hysterotomy. Sometimes this is necessary to safely deliver the baby if, for instance, the baby is very preterm or is not lying head-first in the uterus. In other cases, the provider may decide during the delivery that a vertical incision is safest for delivering the baby. A vertical uterine incision is not a surgical complication, but it may mean that a vaginal delivery is not an option in future pregnancies.

Obtaining records about your previous delivery can be important because the type of incision on your skin is not necessarily the type that was made on your uterus. For instance, you may have a vertical incision on your skin but a horizontal incision on your uterus, or vice versa. Generally, the information about your type of incision will be in your operative report, so your provider may seek to obtain these records.

Your provider will also likely ask you about any attempts at having a vaginal birth after cesarean delivery, including any complications that might have occurred during labor.

The total number of cesarean deliveries and other uterine surgeries that you have had, such as myomectomy (a surgical procedure to remove uterine fibroids), will also be important for deciding about the timing of your delivery.

I had a prior classical cesarean delivery. What are some considerations for the timing of a repeat cesarean delivery?

A classical incision is performed on the upper, thicker portion of the uterus. Although there is an increased risk of uterine rupture (the scar breaking open) in a subsequent pregnancy, the chance of this happening is only between 4% and 9%. Uterine rupture is most likely to occur during labor, but it can sometimes occur even before labor.

For that reason, your repeat cesarean delivery will ideally be done before you go into labor. The risk of uterine rupture, however, needs to be carefully balanced against the risks of prematurity for your baby.

As a general rule, it is recommended that women with a prior classical uterine incision undergo repeat cesarean delivery between 36 and 38 weeks of gestation.

I have never had a classical cesarean delivery but have had fibroids removed. When should my cesarean delivery be performed?

A myomectomy (removal of a fibroid) can result in the disruption of the muscle wall of the uterus, depending on the type of surgery performed. There are many types of myomectomies, and each surgery is different, so risks for your current pregnancy depend on exactly what happened during your fibroid surgery. Important information that your obstetric provider will consider includes the number and size of the fibroids removed, the surgical approach (laparoscopic or open), and whether or not your uterus was entered and if so, how big was the incision. Therefore, your provider will usually want the operative reports from your fibroid surgery.

Given the wide variability in techniques and surgeries, there are limited data to know the best way to manage future pregnancies. In general, if your provider has recommended you have a cesarean delivery because of a prior myomectomy, it is usually done at 39 weeks of gestation.

Depending on the exact nature of your myomectomy, however, it may be best to deliver slightly earlier, between 37 and 38 weeks of gestation.

I have never had a classical cesarean delivery but have had several cesarean deliveries. When should my next cesarean delivery be planned?

Women who have had more than 2 prior cesarean deliveries are usually not candidates for a trial of labor after cesarean (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 his or her 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.

Further, multiple previous surgeries can increase the risk of the placenta growing into the wall of the uterus. This may require the uterus to be removed immediately (cesarean hysterectomy); again, it is safest to be in the operating room if that is necessary.

Most of the time, these complications do not occur. Nevertheless, to minimize the risks to you and your baby, repeat cesarean delivery is usually recommended at 39 weeks of gestation. Depending on complications in a prior cesarean

delivery, your provider may also decide that it is safest for you to have the repeat cesarean delivery earlier, at 37 to 38 weeks of gestation.

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

Women who have had a uterine rupture should not attempt a vaginal delivery because there is a 9% risk of repeat rupture. Your provider will likely recommend a scheduled repeat cesarean delivery between 36 and 38 weeks of gestation.

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