



**Pine Ridge**

**Obstetrix & Gynecology Inc.**

*Healthy Women. Healthy Community.*

## VAGINAL BIRTH AFTER CESAREAN DELIVERY (VBAC)

*Dear Dr. Brown,*

*My daughter is expecting her second baby. Her first baby was delivered via cesarean delivery and her obstetrician has declined to allow her to attempt a vaginal delivery (VBAC) for this baby. I had two babies normally, then a cesarean delivery, and then two more normal vaginal births. Why would my daughter's obstetrician decline to allow her to deliver this baby vaginally?*

Many women seek to give birth via a natural, vaginal delivery after having had a cesarean delivery. Doctors use the acronym TOLAC (Trial of Labor After Cesarean) to describe the attempt of a mother to have a baby via a vaginal delivery after a cesarean delivery and VBAC (Vaginal Birth After Cesarean) to describe a successful vaginal birth after Cesarean delivery. Because the United States has the third highest rate of cesarean deliveries after Puerto Rico (second) and Brazil (first), there has been a national call to action to reduce the rate of cesarean births to as low a level as is practically possible.

There are many benefits to having a baby via a vaginal birth. These include: a shorter period of recovery; less blood loss with lower chances of receiving a blood transfusion and its products; fewer chances of bladder or bowel injury; and less pain with less need for use of narcotic medications. Because there is no surgical incision in a vaginal delivery there is no risk of a visible and unattractive scar, or internal scarring (called "intra pelvic adhesions") that can cause pain in the intra-pelvic area of the abdomen. Lastly, with a vaginal delivery there are fewer chances of pulmonary embolism—a potentially fatal condition where one or more blood clots migrate through the bloodstream to the lungs and block one or more of the arteries in the lungs.

As much as vaginal births are desirable, there are some risks to be considered if a woman wants to try to deliver vaginally after a cesarean that could outweigh the benefits listed in the previous paragraph. Some questions to consider include the following:

1. Why was the first baby delivered by Cesarean? Was there an issue with the baby? (Doctors call this a "fetal indication")  
Example was the baby breeched in position (feet first), or macrosomia (larger than 9 lbs.) in size?



*Pine Ridge*

*Obstetrix & Gynecology Inc.*

*Healthy Women. Healthy Community.*

Was the baby struggling during labor (in distress, lack of oxygen)? – this is also called intra-partum non-reassuring fetal heart tracing.

If the reason for the cesarean was due to an issue the baby was having, then a new baby might not have the same issue. This means the mom could be a good candidate for a successful attempt (TOLOC) and delivery of a baby via a vaginal delivery (VBAC) in a later pregnancy.

**Maternal issues- this may include but not limited to:**

- Failure to progress in labor, i.e. the cervix does not completely dilate and efface
- Failed induction of labor, i.e. Despite administration of medication and disruption of the amniotic sac, labor did not occur.
- Mom's pelvis was too narrow for the baby to pass through
- Malformation of the uterus and or cervix (Hypoplastic "infantile" cervix)

These issues are not likely to change with later pregnancies so future attempts at a vaginal delivery may represent an unacceptable level of risk to mom and baby.

Type of uterine scar from the first cesarean delivery. If the delivery was very preterm, i.e. less than 30-week gestation, or an emergency (STAT) cesarean, the uterine incision may include a vertical incision (high fundal classical). When the incision has a vertical line on the uterus, as opposed to a strictly horizontal line (bikini style), the incision is less stable and more likely to tear or rupture than the bikini style scar. In this event, an attempt to deliver vaginally (TOLAC) is not recommended because the potential uterine scar rupturing or tearing may pose a risk to baby, mother or both. This is a very serious situation that could result in the death of the baby and maternal bleeding (hemorrhage) that may require a cesarean hysterectomy be performed. Six percent of perinatal deaths (baby) are associated with uterine rupture. If this situation applies to you, make sure that your physician has the operative report from your prior cesarean to determine if an attempt at a vaginal delivery (TOLAC) is a safe bet in your situation.

There have been small studies done at a few institutions where women with uterine scars from two prior cesarean deliveries were given the option to attempt a vaginal delivery (TOLAC to VBAC). I would caution the conclusions drawn, given the small size of the study.

2. Hospital Resources--Does the hospital have the necessary support for an emergency cesarean if it is required?

A physician may decline an attempt at a vaginal delivery because the hospital is not equipped to provide for an emergency cesarean delivery. Emergency cesarean deliveries require a ready-to-go personnel team at the labor and delivery department in the event



# Pine Ridge

Obstetrix & Gynecology Inc.

Healthy Women. Healthy Community.

of unforeseen complications that require an emergency cesarean. Smaller facilities may not be prepared to perform this level of service on an emergency basis.

3. Past Maternal Obstetric History- this factor plays a vital role in determining success of an attempted vaginal delivery after a cesarean delivery. A patient who has had successful vaginal births in the past is most likely to be successful at birthing vaginally in subsequent pregnancies
4. Hospital Policy--Most hospitals have stringent rules regarding attempting a vaginal attempted delivery after a cesarean delivery (TOLOC to VBAC) and others do not provide this option at all. A common requirement is that the presiding obstetrician MUST be present in-house during the entire process of labor to delivery of a TOLAC to VBAC patient. This is for the safety of the patient, the baby, the physician and the hospital staff. This places restrictions on the activities of the attending obstetrician with regards to his or her other patients, commitments and many providers do not offer such options to their patients.
5. Timing-- It is best for mom and baby if labor begins spontaneously rather than being induced. If the baby needs to come before labor has begun on its own, preinduction of labor by chemical and occasionally mechanical means is generally not recommended. Studies have shown, that initiating an attempted vaginal birth after a cesarean (TOLAC to VBAC) is most likely to be successful at the 39<sup>th</sup>-week gestation but not beyond the 40<sup>th</sup> week. It is important to emphasize that cesarean delivery after failed TOLAC has more comorbid complication compared to Elective Repeat Cesarean delivery.
6. How Big is the Baby? Most institutions will not permit TOLAC to VBAC if the weight of the baby is greater than 4000 to 4500 g.

Because each mother, baby, and pregnancy are unique, my recommendation is that each patient must discuss the risks, benefits, indications and alternatives with their Obstetrician, so that all parties can together determine the best option for a safe, healthy delivery.

Given the brevity of this presentation, I have listed a few references to assist and direct further reading.

As always, please contact me with any questions on this or other subjects via my practice website at [pineridgeobgyn.com](http://pineridgeobgyn.com) or via email: [ibrown@pineridgeobgyn.com](mailto:ibrown@pineridgeobgyn.com).

#### References:

1. Gregory KD, Korst IM et al, vaginal birth after cesarean and uterine rupture rates in California Obst Gynecol 1999; 94:985-9
2. National Institute of Health Consensus Development conference statement: vaginal birth after cesarean- new insights March 8-10, 2010. Obstet Gynecol 2010; 115:1279-95



*Pine Ridge*

Obstetrix & Gynecology Inc.

*Healthy Women. Healthy Community.*

3. Gregory KD et al Vaginal birth after cesarean: clinical risk factors associated with adverse outcome Am J Obstet Gynecol 2008;198:452
4. Rates of Cesarean Delivery-United States 1991. Centers for Disease Control and prevention (CDC) MMWR 1993; 42:285-9.
5. Cahill AG, Odibo AO, et al Is vaginal birth after cesarean -VBAC or Elective repeat cesarean safer in women with prior vaginal delivery? Am J Obstet Gynecol 2006; 195:1143