Congratulations on your pregnancy!

We are here to help guide you on your exciting journey!

You had a cesarean section with a previous pregnancy. There may be options for you for this birth. Have you considered your desired way of delivery; a vaginal birth or a repeat cesarean section? This handout's purpose is to give you medical information to help you, as you, your support person and your obstetrician make that decision together. Medical factors are not the only consideration. Maybe your last birth was not what you had hoped for and you would like to avoid the same scenario. Or maybe you already know how you would like to deliver. There are many aspects to discuss with your support person and obstetrician as your team helps you make this important decision.

CHOICES:

You have two choices:

1. Possible TOLAC , Trial of Labor After Cesarean Section, or
2. a repeat cesarean section

DEFINITIONS:

First, there are some definitions that need to be clarified.

TOLAC means "trial of labor after cesarean section".

VBAC means "vaginal birth after cesarean section".

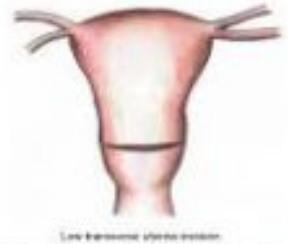
So, when a woman has a TOLAC, trial of labor after cesarean section, some will have a successful VBAC, vaginal birth after cesarean section, and some will have a repeat cesarean section.

LTCS this refers to what kind of incision was made upon the uterus – low transverse segment cesarean section- this is the most common type of incision and the incision that allows for a TOLAC. It carries the least risk for uterine rupture.

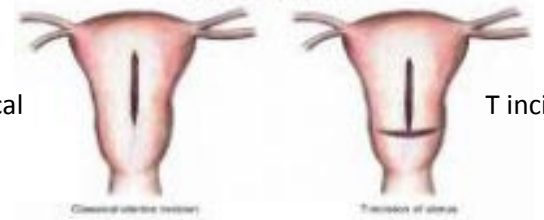
Classical or T incision refers to an up and down incision or an incision that was a low transverse incision

that then needed to be extended upward. These two types of incision do not allow for a TOLAC as it has a highest rate for the uterine scar to open, dehisce or the uterus to rupture.

LTCS



Classical



T incision

So how do you decide?

There are several factors.

The best scientific studies to look at are randomized trials comparing maternal or neonatal outcomes between women attempting TOLAC and those undergoing a repeat cesarean delivery. But there are none.

What next?

Instead, recommendations regarding the approach to delivery are based on observational studies that have examined the probability of VBAC once TOLAC is attempted and the maternal and neonatal morbidities associated with TOLAC compared with repeat cesarean delivery. These data were summarized in the Evidence Report/Technology Assessment that provided background for the 2010 National Institutes of Health Consensus Conference

What are the advantages if you have a successful TOLAC and VBAC?

You will avoid major abdominal surgery. You have a lower rate of hemorrhage, thromboembolism, also known as blood clots in the legs or lungs, and infection. You will most likely have a shorter recovery period than women who have an elective repeat cesarean delivery.

Also, if you are considering future pregnancies, VBAC may decrease the risk of maternal consequences related to multiple cesarean deliveries e.g., hysterectomy, bowel or bladder injury, transfusion, infection, and abnormal placentation such as placenta previa and placenta accrete

Which method of delivery has the fewest risks?

VBAC, a successful vaginal birth after cesarean section, is associated with fewer complications than elective repeat cesarean delivery, whereas a failed TOLAC, trial of labor ending in cesarean section, is associated with more complications.

Successful vaginal birth has the fewest risks.

Failed trial of labor ending in cesarean section has the most risks.

And a repeat cesarean section has fewer risks than a TOLAC ending with a cesarean section, but more risks than a successful VBAC.

What are the risks involved with TOLAC and cesarean section?

This handout acts as a tool to help you make an educated decision. So, let's look at the risks.

Elective repeat cesarean delivery and TOLAC are associated with maternal and neonatal risk. The risks of either approach include maternal hemorrhage, infection, operative injury meaning possible injury to your organs such as your bladder or bowel or bowel obstruction, thromboembolism, hysterectomy, and death. Most maternal morbidity, (complications) related to TOLAC occurs when a repeat cesarean delivery becomes necessary.

This risk list is not all inclusive.

Risks with percentage of repeat c/s vs TOLAC

Complication	**Repeat cesarean section**	**TOLAC**
infection	3.2%	4.6%
Surgical injury	.3 to .6%	.37 to 1.3%
Blood transfusion	.46%	.66%
Hysterectomy	.16 %	.14%
Uterine rupture	.02%	.71%
Maternal death	.0096%	.0019%
NICU admission	1.5 to 17%	.8 to 26.2%
Perinatal death	.05%	.13%

This chart is from ACOG Practice Bulletin # 184

What is the vaginal delivery rate for women attempting TOLAC?

Most published series examining women attempting TOLAC have demonstrated a vaginal delivery rate of 60–80%.

Where should you deliver?

TOLAC with anticipated VBAC should be attempted only in those facilities capable of performing emergency cesarean deliveries and, thus, those with an appropriate nursing staff, anesthesia team, operating room, and obstetrician immediately available in case an emergency cesarean delivery becomes necessary. INOVA Fairfax Hospital and the doctors of our practice meet those criteria.

What are criteria that can positively affect the vaginal delivery rate for a VBAC?

- If your first cesarean section was due to a circumstance that is not repeating i.e. a breech baby or placenta previa
- If you have had a previous vaginal birth

What are criteria that can adversely affect the vaginal delivery rate for a VBAC?

- If your first cesarean section was due to arrest of labor, you stopped dilating or the baby wouldn't come down into the pelvis
- If you need to be induced or need augmentation of your labor with Pitocin
    - One study of 20,095 women who had undergone prior cesarean delivery found a rate of uterine rupture of 0.52% for spontaneous labor, 0.77% for labor induced
- Increasing maternal age
- Increased BMI
    - one large cohort study, 85% of normal weight (BMI of 18.5–24.9) women achieved VBAC whereas only 61% of morbidly obese (BMI of 40 or more) women achieved VBAC
- Increasing gestational age, greater than 40 weeks
    - Studies evaluating the association of gestational age with VBAC outcomes have consistently demonstrated decreased VBAC rates in women who undertake TOLAC beyond 40 weeks of gestation
- Preeclampsia
- If your last delivery was less than 19 months ago

Who are candidates for TOLAC?

Most of the evidence suggests that most women with ***one previous cesarean delivery with a low-transverse incision*** are candidates for TOLAC.

Conversely, those at high risk of uterine rupture, e.g., those with a previous classical or T-incision, prior uterine rupture, or extensive uterine surgery and those in whom vaginal delivery is otherwise contraindicated, e.g., those with placenta previa, are not candidates for planned TOLAC.

Good candidates for planned TOLAC are those women in whom the balance of risks as low as possible and chances of success as high as possible are acceptable to the patient and obstetrician.

Questions?

You should make sure to consult with your support person and your obstetrician to answer any questions you may have about the procedures listed here and the information provided in this handout.

References of studies upon request

Information was obtained from ACOG Bulletin #184 dated November 2017 referencing 156 articles on the topic.

CHECK LIST

Today's date_____

Name _____ DOB_____

1. I have received and reviewed the handout on TOLAC, Trial of Labor After Cesarean Section.
2. The risks, benefits, alternatives and complications of each procedure have been explained to me and my questions have been answered.
3. I understand the possible advantages of a TOLAC are that I will avoid major abdominal surgery. My risk of hemorrhage, thromboembolism, also known as blood clots in the legs or lungs, and infection would be lower. I will most likely have a shorter recovery period than women who have an elective repeat cesarean delivery.
4. I understand that most published series examining women attempting TOLAC have demonstrated a 60-80% success rate for a VBAC vaginal birth after cesarean section.
5. I understand that TOLAC has a higher risk for my baby than for me.
6. I understand that if I choose a TOLAC and end up having a cesarean section in labor that I have higher risks than if I had a repeat cesarean section.
7. I understand that the most serious complication of TOLAC is uterine rupture (the scar comes apart), which occurs less than 1% of the time. If this happens, then internal or external bleeding can occur and may require blood transfusion or hysterectomy (removal of the uterus). Very rarely, fetal or maternal injury or death may also happen.
8. I understand that each birth is different and that unexpected conditions or complications may arise during labor which may necessitate a change in course from the desired procedure in order to safeguard my health and/or my baby's health.
9. I acknowledge that this is my informed decision based on my understanding of the risks, benefits, alternatives and complications associated with each procedure.

_____I want a trial of labor (TOLAC)

_____I want a repeat cesarean section

_____I am undecided at this time

_____
Patient signature

_____
Physician Signature

_____
Date

_____
Witness Signature

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