Vaginal Birth After Cesarean (VBAC)

A brief intro for HIVE

December 8, 2021

VBAC

Planning a Vaginal Birth after a previous Cesarean Birth

Terminology:

- VBAC: Vaginal Birth After Cesarean
- VBAC2C: Vaginal Birth After 2 Cesareans
- HBAC: Homebirth after Cesarean
- TOLAC: Trial of Labor After a Cesarean

VBAC: Risks & Benefits

Risks

To Birthing Person:

- Uterine Rupture (and resulting sequelae) : 0.5%
- Need for Emergency Csection

To Baby:

- Resulting Sequelae from Uterine Rupture (morbidity, mortality, etc.)

Benefits

To Birthing Person:

- Fewer Complications d/t surgery
- Vaginal Birth, Breast/Chestfeeding
- Less PP mood disorders

To Baby:

- Greater success breast/chest feeding
- Microbiome development
- Long Term Health benefits

Summary Table comparing Complications from Planned VBAC vs. Planned Repeat Cesarean for people with a history of 1 CS

(source: VBAC CPG Ontario Association of Midwives)

TABLE 2: SUMMARY OF FINDINGS – PLANNED VBAC VS. ERCS AFTER ONE PREVIOUS CS

Outcome	Absolute risk with planned VBAC	Direction of effect	Relative risk (95% CI)	Source(s)
Birthing parent outcomes				
Mortality	0 fewer per 1000 (from 0 fewer to 0 fewer)	Little to no difference between groups	RR 0.53 (0.05-5.08)	(25,26,29–31)
Uterine rupture*	4 more per 1000 (from 2 more to 6 more)	Risk increased by planned VBAC	RR 4.30 (2.87-6.44)	(25,27–32)
Hysterectomy	0 fewer per 1000 (from 0 fewer to 1 more)	Little to no difference between groups	RR 1.29 (0.81-2.03)	(25,26,30–32)
Transfusion	1 more per 1000 (from 0 fewer to 2 more)	Little to no difference between groups	RR 1.21 (1.05-1.40)	(27,29,30,32)
Intrapartum infection*	22 more per 1000 (from 15 more to 29 more)	Risk increased by planned VBAC	RR 1.59 (1.42-1.78)	(30)
Postpartum infection	8 more per 1000 (from 0 fewer to 20 more)	Little to no difference between groups	RR 1.44 (0.98-2.12)	(25,26,29)
Neonatal/perinatal outcomes				
Mortality*	1 more per 1000 (from 0 fewer to 2 more)	Risk increased by planned VBAC	RR 2.61 (1.33-5.11)	(25–32)
Neonatal infection*	5 more per 1000 (from 1 more to 9 more)	Risk increased by planned VBAC	RR 1.40 (1.07-1.83)	(25,26,30–32)
Apgar score < 7 at 5 minutes*	9 more per 1000 (from 5 more to 16 more)	Risk increased by planned VBAC	RR 2.93 (2.03-4.24)	(25,27,32)
Transient tachypnea of the newborn (TTN)	3 fewer per 1000 (from 9 fewer to 5 more)	Little to no difference between groups	RR 0.90 (0.70-1.16)	(26)
Respiratory distress syndrome	2 fewer per 1000 (from 4 fewer to 2 more)	Little to no difference between groups	RR 0.59 (0.26-1.36)	(25,26,30,32,44)

*Finding significant: $p < 0.05$

Inclusion Criteria: Planning VBAC & HBAC

Interval Between Births	• 18 months between births (previous child by Csection is at least 9mo at time of conception)
Type of Incision	• Lower segment transverse incision
Highly Motivated	• Motivated to plan VBAC and prepare accordingly
Emergency Services	• If planning home, how close to emergency? • Understanding of local hospital policies

Increased Success: Planning VBAC & HBAC

Prior Vaginal Birth	• Either before or after previous Csection
Delivery Interval	• At least 24 months between births
Spontaneous labor	• Labor starts on its own • Labor progresses normally
Low Risk Pregnancy	• Parental age <35, BMI <30, otherwise low risk • Reason for previous CS does not repeat

Usual Exclusion Criteria: VBAC & HBAC

Incision Type, History	• Classical, T, J incisions, extended incisions • Single layer closure on previous surgery • Known uterine dehiscence • Previous Myomectomy, or other hysterotomy • Previous Uterine Rupture • Previous CS <18 months prior
Other Exclusion	• Placenta Previa, Cord Prolapse, Transverse Lie • Abnormal Placentation • Obstetrical complication (Pre-E, HELLP, etc.)

Birthplace with VBAC

Home

Intermittent Monitoring

Lower Anxiety (?)

Low Intervention

Midwife attendance

Home tx to Hospital

How will the planned home VBAC be received at the hospital?

- The client?
- You?

Prenatal tx? Labor tx?

Planned Hospital

Continuous monitoring

Lower rates of VBAC

Often encourage epidurals “just in case”

Often have a team on standby for emergency

Lower risk tolerance

Uterine Rupture

The big scary complication we're concerned about with VBAC.

Symptoms:

- Fetal Bradycardia **
- Low BP, High Pulse (Parent)
- Bleeding (Vaginal, Urine)
- Restlessness (Parent)
- Loss of Fetal Station, Meconium
- Abnormal Pain Presentation (difficult to assess in labor)

Likelihood

- VBAC : 0.5% (1 in 200)
- VBAC2C: 1-2% (2-3 in 200)
- CS / ERCS: 0.01% (1 in 10,000)
- Vaginal Birth: 0.02% (2 in 10,000)

Risk Comparison

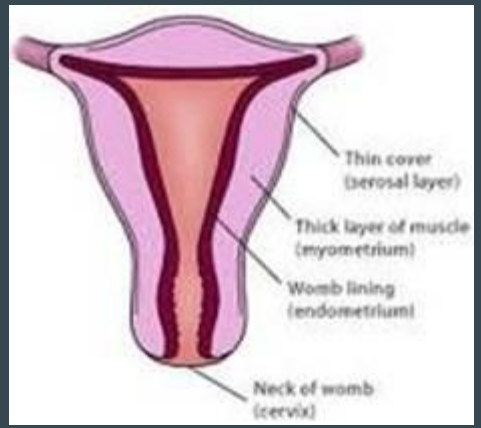
To understand **how often such emergencies happen during labor or birth**, let's look at the following table:

Table 1.			
Uterine Rupture[1]	**Placental Abruption[2]**	**Umbilical Cord Prolapse[3]**	**Shoulder Dystocia[4]**
7-8 out of every 1000 VBAC attempts	11-13 out of every 1000 labors	14-62 out of every 1000 labors	6-14 out of every 1000 labors

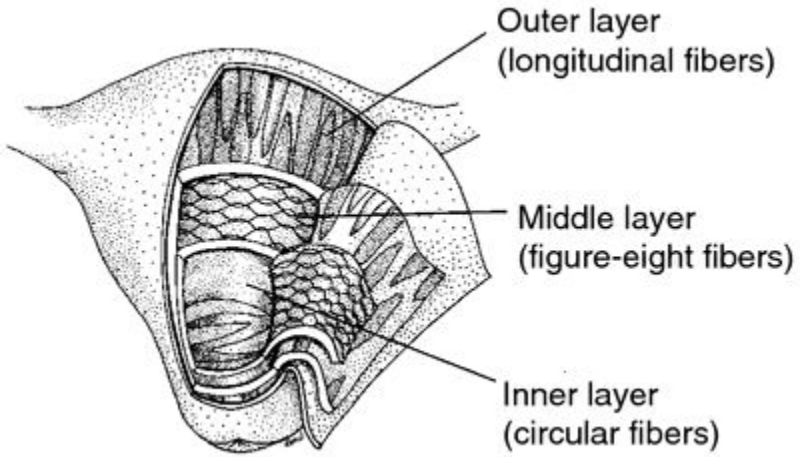
The next table shows **the risk of a baby dying as a result of one of these emergencies**:

Table 2.			
Uterine Rupture	**Placental Abruption**	**Umbilical Cord Prolapse**	**Shoulder Dystocia**
6 out of every 100 uterine ruptures will result in a baby's death	1.25 out of every 750 placental abruptions will result in a baby's death	91 out of every 1000 babies with cord prolapsed will die	1 out of every 1000 babies with shoulder dystocia will die

Uterine Scar Dehiscence



"Thinning" of a scar - separation at internal layers (not external, not full rupture)



Postdates and Inductions with VBAC Clients

Is it safe to induce a client with a scarred uterus? Under what circumstances/conditions?

- Oxytocin
- Misoprostol
- Prostaglandin Gel
- Foley
- Herbs
- Homeopathics
- Castor Oil