Giving Birth After C-Section

Clients with a prior cesarean section (C-section) have a choice between planning a vaginal birth after cesarean (VBAC) and an elective repeat C-section. It is important to consider the risks and benefits associated with both choices. The evidence shows that with proper risk assessment, preparation, and monitoring, VBAC is generally safe for women and babies. The success rate of a trial of labour typically ranges between 50% and 85%, depending on the clinical circumstances[1]. The following is a risk-benefit analysis of elective C-section and VBAC.

	Elective C-Section	**VBAC**
Risks for the client:	More risk of blood loss and/or clotting complications More risk of needing a blood transfusion More risk of surgical injury and/or infection More risk of general surgical complications More antibiotics given to the client (and thus getting to baby) A longer hospital stay, with a longer recovery time More risk of an abnormal placenta in future pregnancies (placenta previa, when the placenta covers the cervix & accreta, when the placenta is abnormally stuck inside the uterus) More risk of stillbirth in a future pregnancy More risk of uterine rupture in a future pregnancy	Rupture of the uterus (opening at the location of the scar)--rates[2] range from 0.3-0.7% after 1[3] C-section Although rare, if uterine rupture occurs, immediate C-section is needed If the trial of labour is unsuccessful, there is increased risk of infection for the client if a C-section is required
Benefits for the client:	Convenience (being able to schedule the birth)	Less risk of blood loss or clotting complications Less risk of injury and infection No complications associated with surgery A shorter hospital stay, with a more rapid return to full activity Less risk of an abnormal placenta in future pregnancies (placenta previa & accreta) Less risk of stillbirth in a future pregnancy Less risk of uterine rupture in a future pregnancy
Risks for the baby:	Prematurity Breathing difficulties resulting in NICU stays Feeding problems Injury during surgery More separation, less skin-to-skin time with the client	Outcomes for mother and baby are usually good, but 1/5 (20%) of cases of uterine rupture can cause death, or brain injury with long-term disability
Benefits for the baby:	--	Less risk of breathing difficulties that require staying in hospital Reduced chance of preterm birth due to a dating error Possible benefit of immune activation during labour even if a repeat C-section happens Less risk of feeding problems

[1] VBAC Success Calculator is a useful tool in decision-making: https://mfmu.bsc.gwu.edu/PublicBSC/MFMU/VGBirthCalc/vagbirth.html

[2] This rupture rate is associated with one prior lower-transverse-uterine-segment C-section; the rates associated with vertical (classical) or T-shaped incisions are 4-9% and repeat C-section is recommended.

[3] Risk of uterine rupture with more than 1 previous C-section is 0%–3.7%.

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What Are the Odds?

- Clients with a "non-recurring" reason for a prior C-section (e.g. breech, malposition, or fetal distress) have an ~80% chance of VBAC with spontaneous labour.
- Clients with a "recurring" indication for a prior C-section (for example, lack of fetal descent despite good position and adequate contractions) have a 60% chance of vaginal birth with spontaneous labour. Estimates of success and uterine rupture can change depending on progress in pregnancy & labour.
- Women with a prior vaginal birth have a high chance of success (90%) and a lower risk of rupture (.003%).
- Women needing induction have a lower chance of successful VBAC and a higher risk of uterine rupture.
- Women with the following circumstances would *not* be offered a VBAC: a previous classical or inverted "T" uterine scar, previous surgery in which an incision was made into the uterus, previous uterine rupture, any contraindication to labour such as placenta previa or malpresentation (when the baby is not head-down near the due date).

Current Guidelines for Clients Choosing VBAC

- Although an obstetrical consult to discuss planned mode of delivery is not recommended for clients with a history of one uncomplicated lower-segment C-section, they are available to clients who prefer one.
- Only clients whose prior C-section was by transverse lower-uterine-segment incision are generally offered a trial of labour.
- Labour and delivery should be in a hospital where a timely C-section is available.
- Blood work (CBC, group and screen) is advised upon admission to facilitate access to anesthesia and/or surgery if needed.
- Continuous electronic fetal monitoring in active labour is recommended (since the most reliable first sign of uterine rupture is a abnormal fetal heart tracing).
- Assessing progress of labour should be done frequently since prolonged labour is associated with an increased risk or failure and uterine rupture.
- An intravenous line is advised in labour for ease of access in the event of an emergency.
- Induction of labour may be discussed, provided the rationale and risks have been reviewed.
- Augmentation of labour with carefully monitored oxytocin is considered safe.
- Elective C-sections are not scheduled until after 39 weeks gestation to ensure fetal lung maturity. If labour starts before 39 weeks, a C/S can be performed at that time if desired.
- Women wishing a VBAC who do not enter labour by 41-42 weeks gestation will be offered reassessment by an obstetrician.

Symptoms & signs of uterine rupture (which requires immediate intervention) may include, but are not limited to:

- Abnormal uterine or abdominal pain
- Cessation of contractions
- Excessive vaginal bleeding
- Abnormal fetal heart rate
- Deterioration in the client's vital signs (blood pressure, heart rate, breathing)

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My Choice

I, _____ (print full name) have had ___ prior C-section(s) and ___ previous vaginal birth(s). I have read the above information and have discussed the benefits and risks of VBAC with my midwife or physician. I understand that I may request an elective repeat C-section at any time during my pregnancy or labour.

☐ I have been offered a referral for consultation with a specialist to discuss VBAC or an elective repeat C-section.

☐ I accept ☐ I decline

☐ My midwife/physician has reviewed with me my previous Operative Report(s) and the type of uterine scar(s) that I have.

☐ I have chosen to plan a VBAC in the hospital, and understand the recommendations for continuous electronic fetal monitoring, an intravenous (IV) line, and admission lab work.

☐ Continuous Electronic Fetal Monitoring	☐ I accept	☐ I decline
☐ Intravenous line (IV)	☐ I accept	☐ I decline
☐ Admission lab work (CBC, group & screen)	☐ I accept	☐ I decline

☐ I have chosen to plan a vaginal birth after Cesarean (VBAC) with midwifery care in an out-of-hospital setting. I understand and acknowledge that current SOGC[4] guidelines recommend that all VBACs occur in a hospital setting. I understand that I will not have immediate access to emergency obstetrical care in the event of a uterine rupture or other serious event.

☐ Intravenous line (IV) ☐ I accept ☐ I decline

☐ I have chosen to plan an elective repeat C-section at 39 weeks (or earlier if I go into labour sooner).
☐ I have chosen to plan a vaginal birth after Cesarean (VBAC) if I enter labour spontaneously prior to approximately ___ weeks gestation. If labour has not occurred by that time, I choose to deliver by planned C-section.

Date_____ Signed _____(client)

Date_____ Signed _____(midwife/physician)

References

Alberta Health Services Calgary Health Region Department of Family Medicine (Midwifery Program) Nov 2008
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BC Best Birth Clinic http://www.powertopush.ca/birth-options/types-of-birth/vaginal-birth-after-cesarean/ Accessed 06 Dec 2016
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[4] SOGC = Society of Obstetricians and Gynaecologists of Canada. For the complete SOGC Guideline, see:
Martel MJ, MacKinnon CJ. SOGC Clinical Practice Guideline No. 155: Guidelines for Vaginal Birth After Previous Caesarean Birth. *J Obstet Gynaecol Can* 2005;27(2): 164-174.