

MODULE 4

A Closer Look at Repeat Cesareans: Benefits and Risks



The Decision to Give Birth After a Cesarean May Be Difficult:

- ☛ Mothers want what is safest for their baby.
- ☛ For some, this means scheduling a repeat cesarean, but for many it's laboring for a VBAC.
- ☛ Given the same information about benefits and risks, individuals are empowered to make totally different choices.

Why Do Some Mothers Choose an Elective Repeat Cesarean?

- ☛ They had previous negative experiences during a vaginal birth.
- ☛ They experienced disrespect and abuse during childbirth.
- ☛ They mistrust the healthcare system.

Betrán, A. P., et al. (2018). Interventions to reduce unnecessary caesarean sections in healthy women and babies. *The Lancet*, 392(10155), 1358-1368. doi: 10.1016/S0140-6736(18)31927-5

Why Do Some Expectant Parents Choose an Elective Repeat Cesarean?

- ☞ Fear of pain from labor.
- ☞ Concern about pelvic floor damage.
- ☞ Concern about negative effects of vaginal birth on sexuality.
- ☞ Fear of urinary incontinence.
- ☞ Perception that a cesarean is safer for the baby and/or mother.



Betrán, A. P., et al. (2018). Interventions to reduce unnecessary caesarean sections in healthy women and babies. *The Lancet*, 392(10155), 1358-1368. doi: 10.1016/S0140-6736(18)31927-5

Why Do Some Mothers Choose an Elective Repeat Cesarean?

- ☛ Specific date of birth is perceived as lucky for a child in some cultures.
- ☛ Convenience of scheduling a specific birth date.
- ☛ Ability to schedule maternity leave from work.



Betrán, A. P., et al. (2018). Interventions to reduce unnecessary caesarean sections in healthy women and babies. *The Lancet*, 392(10155), 1358-1368. doi: 10.1016/S0140-6736(18)31927-5

Why Do Some Mothers Choose an Elective Repeat Cesarean?

- Allows partner to be present at birth.
- Not having to repeat a difficult and painful labor.
- Knowing what to expect.
- Perception of having more control of the birth compared to a previous difficult birth experience that ended with a cesarean.

Betrán, A. P., et al. (2018). Interventions to reduce unnecessary caesarean sections in healthy women and babies. *The Lancet*, 392(10155), 1358-1368. doi: 10.1016/S0140-6736(18)31927-5

How Do Most Mothers Make Decisions About VBAC and Repeat Cesarean?

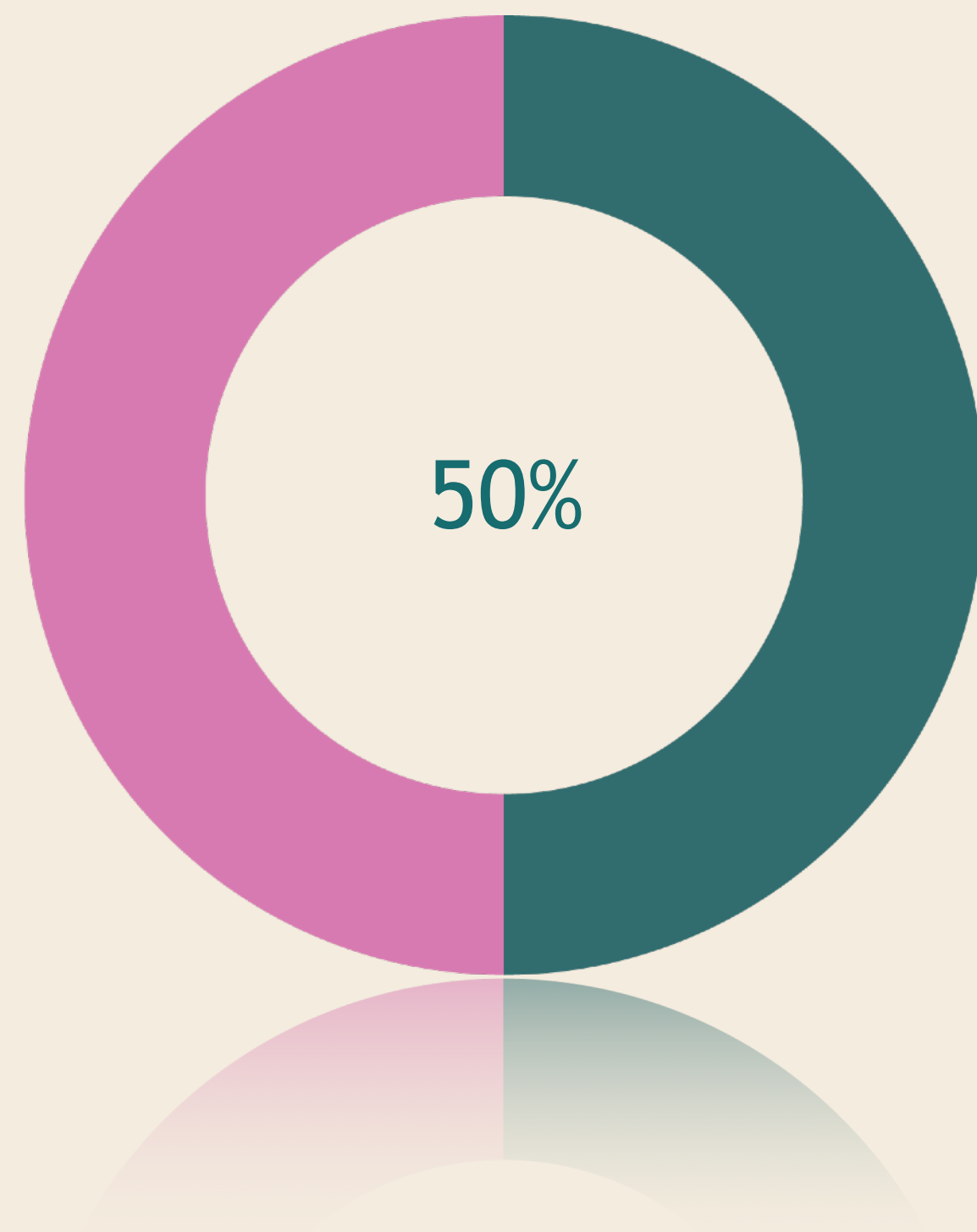
- ☞ Most mothers tend to choose a repeat cesarean or a VBAC based on their provider's preference.
- ☞ The majority of physicians favor a routine repeat cesarean.

Bernstein, S. N., Matalon-Grazi, S., & Rosenn, B. M. (2012). Trial of labor versus repeat cesarean: Are patients making an informed decision? *American Journal of Obstetrics and Gynecology*, 207(3). doi: 10.1016/j.ajog.2012.06.004

Declercq, E. R., Sakala, C., Corry, M. P., Applebaum, S., & Herrlich, A. (2013). *Listening to mothers III: Pregnancy and birth*. New York: Childbirth Connection. <https://www.nationalpartnership.org/our-work/resources/health-care/maternity/listening-to-mothers-iii-pregnancy-and-birth-2013.pdf>



How Do Most Mothers Make Decisions About VBAC and Repeat Cesarean?



Nearly one half of mothers interested in a VBAC had no choice but to have a repeat cesarean. Their maternity care provider and/or hospital did “not allow” VBAC.

Sakala, C., Declercq, E. R., Turon, J. M., & Corry, M. P. (2018). *Listening to mothers in California: A population based survey of women's childbearing experiences*, full survey report. Washington, DC: National Partnership for Women and Families. <https://www.nationalpartnership.org/our-work/health/listening-to-mothers-ca/report/>

What Are the **Benefits** of a Repeat Cesarean for Mothers?

The uterine scar is less likely to separate (which most often occurs during labor).

	Risk of Uterine Rupture
👉 Planned VBAC	4.7 / 1,000
👉 Elective repeat cesarean	0.26 / 1,000

Dy, J., DeMeester, S., Lipworth, H., & Barrett, J. (2019). No. 382-Trial of labour after caesarean. Journal of Obstetrics and Gynaecology Canada, 41(7), 992-1011. doi: 10.1016/j.jogc.2018.11.008

What Are the Benefits of a Repeat Cesarean for Mothers?

- ☛ Complications from cesarean surgery are lower than if you labor for a VBAC and then require another cesarean.
- ☛ You will avoid any stretching of the pelvic floor or vaginal tears.
- ☛ You are less likely to experience pelvic floor muscle weakness (which controls urine and bowel movements in the short-term).



What Are the **Risks** of Multiple Cesareans for Mothers?

Cesarean delivery is associated with a higher risk of severe acute maternal morbidity than vaginal delivery — particularly in women aged 35 years and older.

Korb, D., Goffinet, F., Seco, A., Chevret, S., & Deneux-Tharaux, C. (2019). Risk of severe maternal morbidity associated with cesarean delivery and the role of maternal age: a population-based propensity score analysis. *Canadian Medical Association Journal*, 191(13), E352-E360. <https://www.cmaj.ca/content/191/13/E352>

What Are the Risks of Multiple Cesareans for Mothers?

Each additional cesarean increases the odds for the following:

- ☛ Uterine rupture.
- ☛ Blood transfusion.
- ☛ The formation of a blood clot in the legs or lungs that can be life threatening.
- ☛ Cardiac arrest.
- ☛ Hemorrhage requiring hysterectomy.

Sandall, J., et al. (2018). Short-term and long-term effects of caesarean section on the health of women and children. *The Lancet*, 392(10155), 1349-1357. doi: 10.1016/S0140-6736(18)31930-5

The Risks for Hysterectomy Increase with Each Additional Cesarean

	Risk for hysterectomy per pregnancy:
☞ For women without a prior cesarean:	1 / 25,000
☞ For women with 1 previous cesarean:	1 / 500
☞ For women with 3 or more previous cesareans:	1 / 20

Sandall, J., et al. (2018). Short-term and long-term effects of caesarean section on the health of women and children. *The Lancet*, 392(10155), 1349-1357. doi: 10.1016/S0140-6736(18)31930-5

What Are the Risks of Multiple Cesareans for Mothers?

Each additional cesarean increases the odds for the following:

- ☛ Acute renal failure.
- ☛ Assistance with breathing required.
- ☛ Intubation.
- ☛ Major infection.
- ☛ Surgical injuries to internal organs.
- ☛ Admission to an intensive care unit required.



Sandall, J., et al. (2018). Short-term and long-term effects of caesarean section on the health of women and children. *The Lancet*, 392(10155), 1349-1357. doi: 10.1016/S0140-6736(18)31930-5

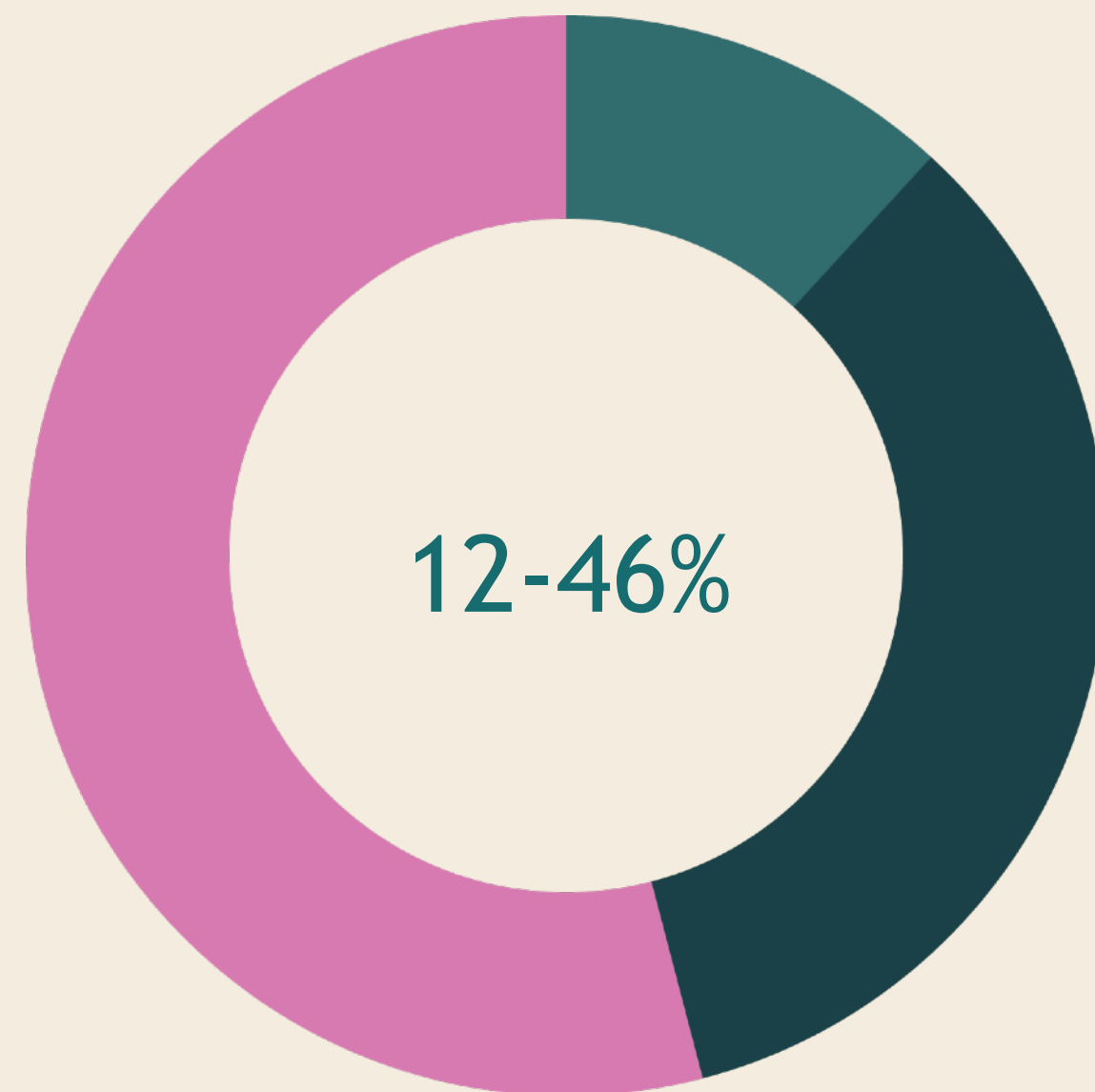
What Are the Risks of Multiple Cesareans for Mothers?

- Ileus (bowel obstruction).
- Chronic pain.
- Sexual dysfunction.
- Adhesions (internal scar tissue that forms between tissues and organs that can complicate cesarean surgery).

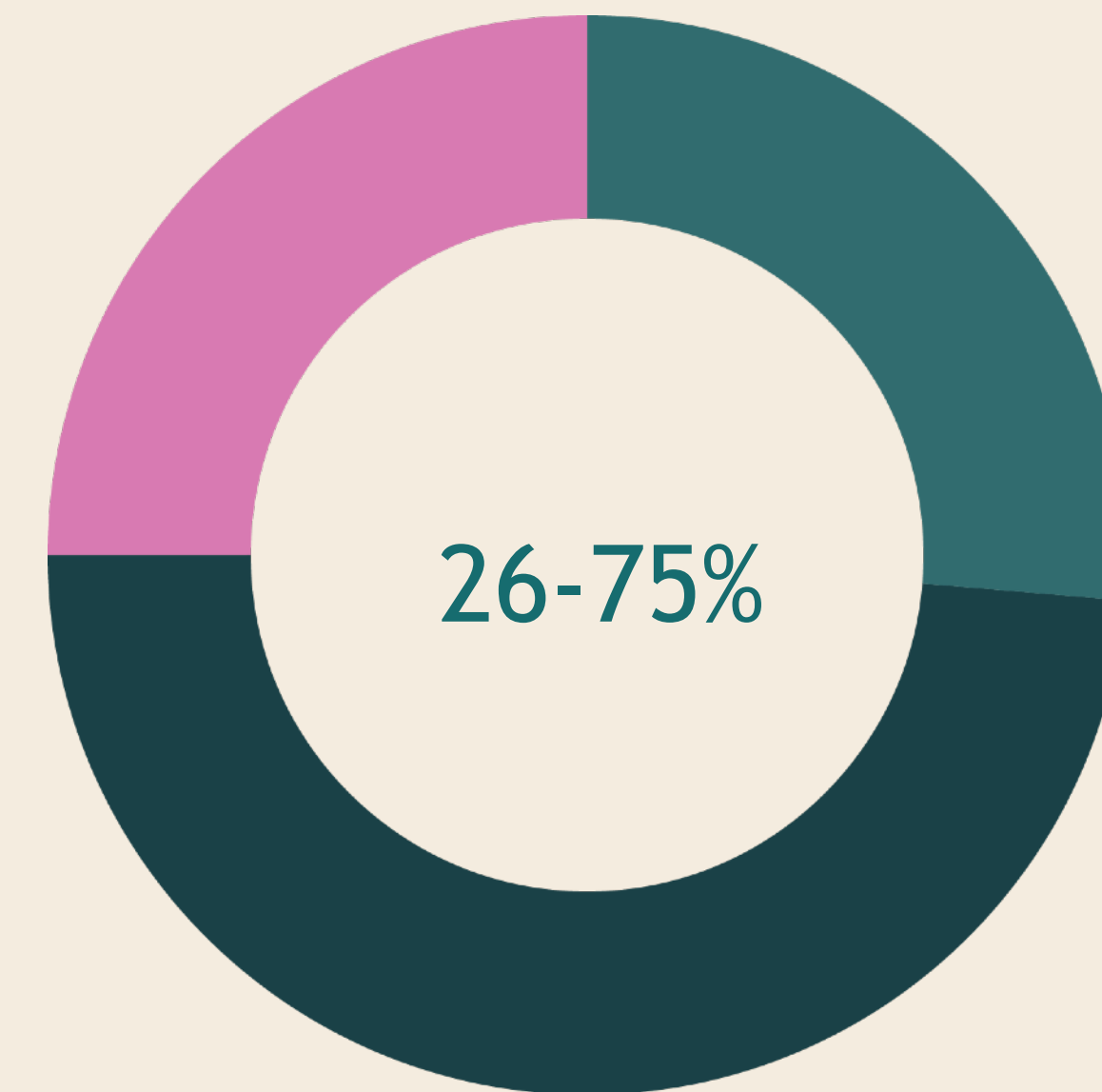
Sandall, J., et al. (2018). Short-term and long-term effects of caesarean section on the health of women and children. *The Lancet*, 392(10155), 1349-1357. doi: 10.1016/S0140-6736(18)31930-5

The Risks for **Adhesion** Increase with Each Additional Cesarean:

After a second cesarean:



After a third cesarean:



Sandall, J., et al. (2018). Short-term and long-term effects of caesarean section on the health of women and children. *The Lancet*, 392(10155), 1349-1357. doi: 10.1016/S0140-6736(18)31930-5

With Multiple Cesareans Surgery Becomes More Complicated.

More time will be needed to complete the surgery, which increases the risk of infection and bleeding for the mother.

Rottenstreich, M., et al. (2018). Prolonged operative time of repeat cesarean is a risk marker for post-operative maternal complications. *BMC Pregnancy and Childbirth*, 18(1), 1-6. doi: 10.1186/s12884-018-2111-8



Multiple Cesareans Increase the Risk for Placental Problems:

- ☞ In a normal pregnancy, the placenta attaches itself to the endometrium (mucous membrane lining the uterus). When the baby is born, the placenta easily detaches from the uterus.
- ☞ Multiple cesarean sections increase the risk of the placenta not detaching safely from the uterine lining.

Placental Problems Associated with Multiple Cesareans:

- ☛ Placenta **previa** (placenta partially or totally covers the mother's cervix).
- ☛ Placenta **accreta** (placenta grows too deeply into the uterine wall).
- ☛ Placenta **increta** (placenta attaches more firmly to the uterus and becomes embedded in the organ's muscle wall).
- ☛ Placenta **percreta** (placenta attaches itself and grows through the uterus and potentially to nearby organs such as the bladder).

Each additional cesarean increases the risk for **Placenta Accreta Spectrum** in a future pregnancy:

Placenta Accreta Spectrum is a life-threatening condition that requires a multidisciplinary team of critical care specialists to manage high-level postpartum hemorrhage while, if possible, avoiding a hysterectomy.

The Risks for Placental Problems Has Dramatically Increased.

The number of mothers giving birth after a prior cesarean has increased three-fold since 1980. The increasing rate of placenta accreta over the past four decades is likely due to the increased rate of cesarean delivery:

Timeline for the U.S.

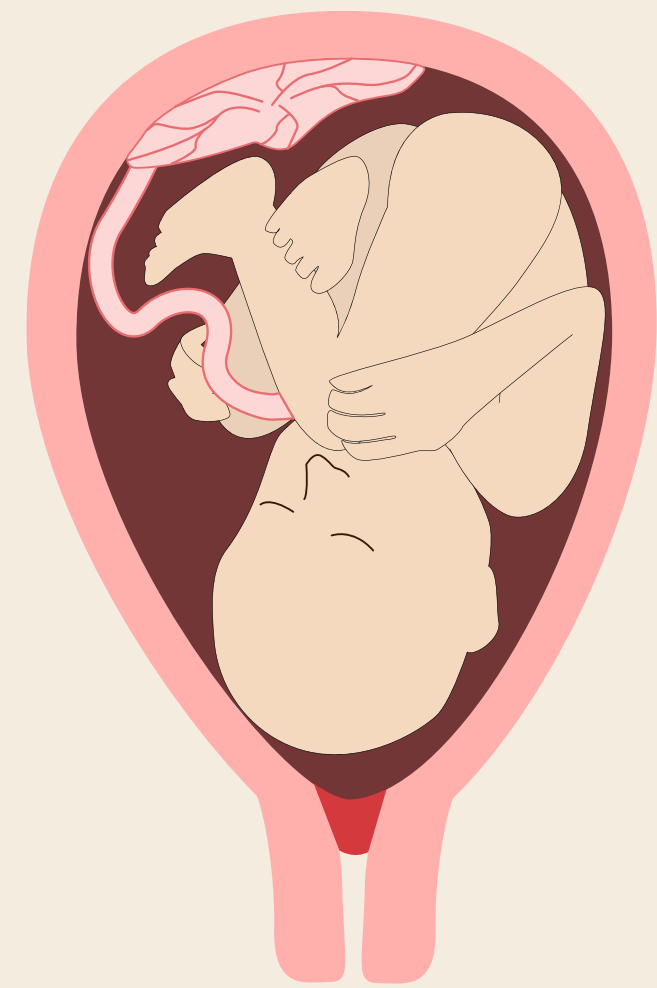
Risk for Placenta Previa and Placenta Accreta with One or More Prior Cesareans

Most recent published rate:	1 / 272
Between 1982 and 2002:	1 / 533
Studies from the 1970s and 1980s:	1 / 2,510 to 1 / 4,017

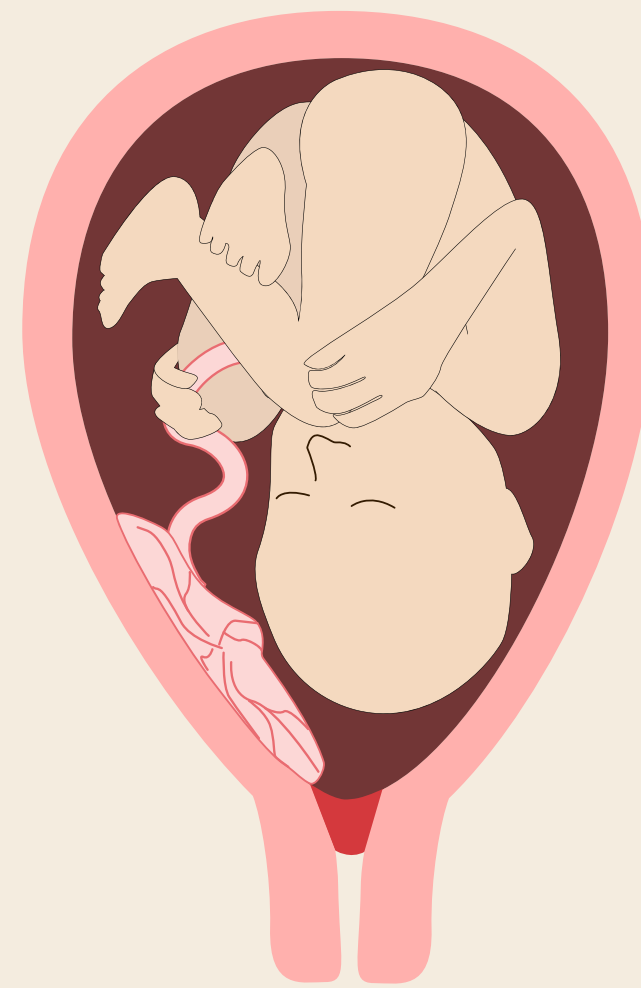
American College of Obstetricians and Gynecologists. (2018). Obstetric care consensus No. 7: Placenta accreta spectrum. *Obstetrics and Gynecology*, 134(2), e164-e173. doi: 10.1016/j.ajog.2018.09.042

The Risk of **Placenta Previa** Increases with Each Additional Cesarean:

PLACENTA PREVIA



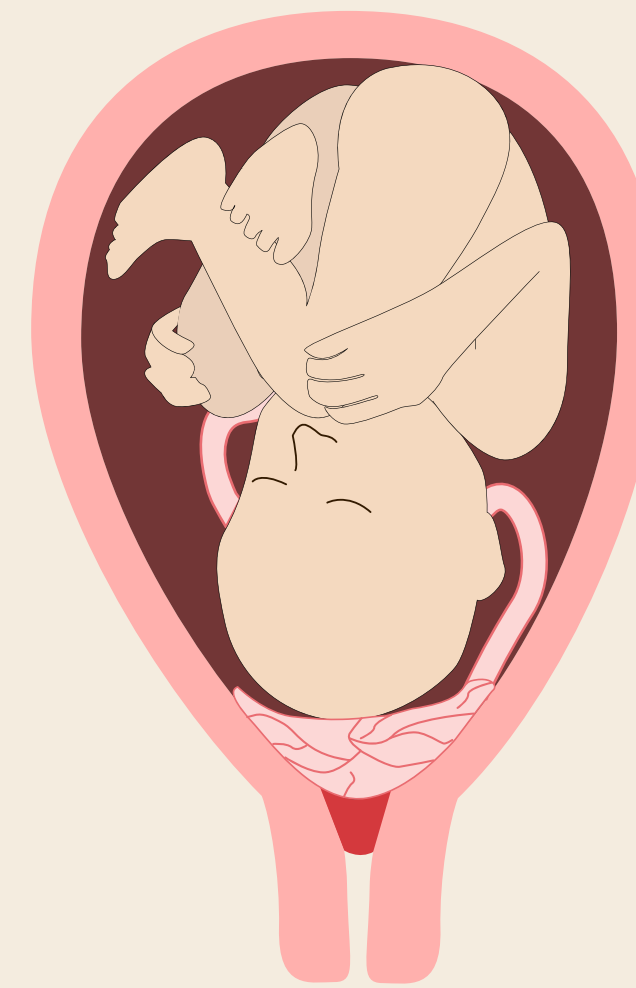
NORMAL
PLACENTA



MARGINAL



PARTIAL



TOTAL

Increased risk after cesarean:

One
1.0%

Two
1.7%

Two+
2.6%

Dy, J., DeMeester, S., Lipworth, H., & Barrett, J. (2019). No. 382-Trial of labour after caesarean. *Journal of Obstetrics and Gynaecology Canada*, 41(7), 992-1011. doi: 10.1016/j.jogc.2018.11.008

The Risks for Accreta Increases with a Placenta Previa and a Prior Cesarean:

Prior cesareans and placenta previa	Risk for placenta accreta
One prior cesarean:	3%
Two prior cesareans:	11%
Three prior cesareans:	40%
Four prior cesareans:	61%
Five or more prior cesareans:	67%

American College of Obstetricians and Gynecologists. (2018). Obstetric care consensus No. 7: Placenta accreta spectrum. Obstetrics and Gynecology, 134(2), e164-e173. doi: 10.1016/j.ajog.2018.09.042

What Are the Psychological Risks of Cesareans?

Many mothers who give birth by cesarean experience higher rates of:

- ☛ Postpartum anxiety.
- ☛ Acute, delayed, or ineffective bonding with their newborn.
- ☛ Depression and longer post-traumatic stress disorder.

California Maternal Quality Care Consensus. (2016). Toolkit to support vaginal birth and reduce primary cesareans. Retrieved from <https://www.cmqcc.org/VBirthToolkit>

What Are the Risks of Repeat Cesareans in a Future Pregnancy?

- ☛ Difficulty becoming pregnant again.
- ☛ Embryo implants in cesarean scar (cesarean scar ectopic pregnancy), which is a life-threatening condition.
- ☛ Fetal malformations.
- ☛ Preterm birth and low birth-weight.

Sandall, J., et al. (2018). Short-term and long-term effects of caesarean section on the health of women and children. *The Lancet*, 392(10155), 1349-1357. doi: 10.1016/S0140-6736(18)31930-5

What Are the **Benefits** of Elective Repeat Cesarean for Babies?

Fewer babies die with an elective repeat cesarean, but the absolute risk is low:

	Planned VBAC	Elective Repeat Cesarean
Perinatal death:	13 in 10,000	5 / 10,000
Neonatal death:	11 in 10,000	5 / 10,000

Dy, J., DeMeester, S., Lipworth, H., & Barrett, J. (2019). No. 382-Trial of labour after caesarean. *Journal of Obstetrics and Gynaecology Canada*, 41(7), 992-1011. doi: 10.1016/j.jogc.2018.11.008

With an Elective Repeat Cesarean, Fewer Babies Have Permanent Neurological Injuries:

	Risk for Neurological Injury
Planned VBAC:	10 / 10,000
Elective repeat cesarean:	< 1 / 10,000

Dy, J., DeMeester, S., Lipworth, H., & Barrett, J. (2019). No. 382-Trial of labour after caesarean. *Journal of Obstetrics and Gynaecology Canada*, 41(7), 992-1011. doi: 10.1016/j.jogc.2018.11.008

What Are the Short-Term Risks of Repeat Cesareans for Babies?

- ☞ Pulmonary hypertension.
- ☞ Surgical injury.
- ☞ More likely to require time in a neonatal intensive care unit (NICU).



What Are the Long-Term Risks of Repeat Cesareans for Babies?

- ☛ Emerging evidence suggests that experiencing labor and passing through the birth canal prepares babies for receiving **beneficial microorganisms** from their mothers. These play a key role in the development of the immune system.
- ☛ Babies born by cesarean are exposed to a different physical, hormonal, bacterial, and medical environment, which can modify neonatal physiology.

Sandall, J., et al. (2018). Short-term and long-term effects of caesarean section on the health of women and children. *The Lancet*, 392(10155), 1349-1357. doi: 10.1016/S0140-6736(18)31930-5

What Are the Long-Term Risks of Repeat Cesareans for Babies?

- ☞ Altered immune development increases the probability for allergies, asthma, and lessens the body's ability to respond to pathogens.
- ☞ The reduced exposure to the mother's microorganisms may affect the child's risk for obesity, metabolic disease, asthma, increased blood pressure, Type 1 diabetes, and stress-related issues.

Sandall, J., et al. (2018). Short-term and long-term effects of caesarean section on the health of women and children. *The Lancet*, 392(10155), 1349-1357. doi: 10.1016/S0140-6736(18)31930-5

Babies whose mothers are diagnosed with **placenta accreta** are at risk for premature birth, breathing problems, and extended stays in a neonatal intensive care unit (NICU).



Birth by Cesarean Can Affect Breastfeeding:

- ☞ With skin-to-skin contact immediately after birth, babies are more likely to breastfeed early and longer.
- ☞ It is best when the mother and baby are not separated during the “golden hour” immediately after birth when the baby is alert, active, and moving to breastfeed.
- ☞ Having a cesarean makes skin-to-skin contact with babies less likely, especially the placement of newborns directly on their mother’s chest within the first hour of birth.



With Supportive Care, Babies Born by Cesarean Can Also Benefit from Immediate Bonding and Breastfeeding:

- ☛ Pregnant people who have a cesarean, **with proper support**, can experience skin-to-skin contact with their babies immediately after birth, which allows both mother and baby to benefit from early breastfeeding.
- ☛ Many hospitals are now making an effort to encourage breastfeeding as soon as possible after a cesarean birth.

For more Information on the Benefits of
Breastfeeding for Mothers and Babies:



See **Module 2: VBAC: *The Benefits and Risks for Mothers and Babies***

You may, in the end, decide that you would prefer a repeat cesarean. A medical issue may make this necessary.

You can plan to have a “gentle,” “natural,” or “family-centered” cesarean to meet your personal needs and ensure that you are involved in your healthcare decision-making.



What is a Gentle Cesarean?

Your caregivers will try to reduce the reality that you are having surgery by creating an atmosphere and experience that is meaningful to you. You can have an empowering birth by considering the many options available to you.

Checklist for Parents:

If you do have a cesarean:

- ☞ To avoid breathing problems for your baby, wait until the end of your pregnancy to give birth (after the 39th week).
- ☞ Ask to have your partner and/or your doula present at the birth.
- ☞ Consider listening to a special piece of music and having the ambient lighting dimmed during the surgery.
- ☞ Consider taking photos or a video of your birth.
- ☞ So you can enjoy being with your baby, ask the anesthesiologist to give you pain medication that does not make you drowsy after the birth.

Checklist for Parents:

If you do have a cesarean:

- ☛ To allow you to see your baby being born, ask for a clear drape or to have it lowered.
- ☛ So you can touch and hold your baby skin-to-skin, ask to have your arms free.
- ☛ Having your baby on your chest helps to regulate temperature and heart rate, is comforting, and makes breastfeeding easier.

Panda, S., Begley, C., & Daly, D. (2018). Clinicians' views of factors influencing decision-making for caesarean section: A systematic review and meta synthesis of qualitative, quantitative and mixed methods studies. *PloS One*, 13(7), e0200941. doi: 10.1371/journal.pone.0200941

If You Do Have a Cesarean:

- ☛ Your partner or family member can also experience skin-to-skin with your baby.
- ☛ To allow for more blood flow from your placenta to the baby, which enriches its blood supply and oxygenation, ask for delayed cord clamping after birth (wait one minute or until the cord stops pulsating before it is cut).
- ☛ Ask the staff to delay the baby's health assessment (weighing, measuring, bathing) until after you have had time for bonding.



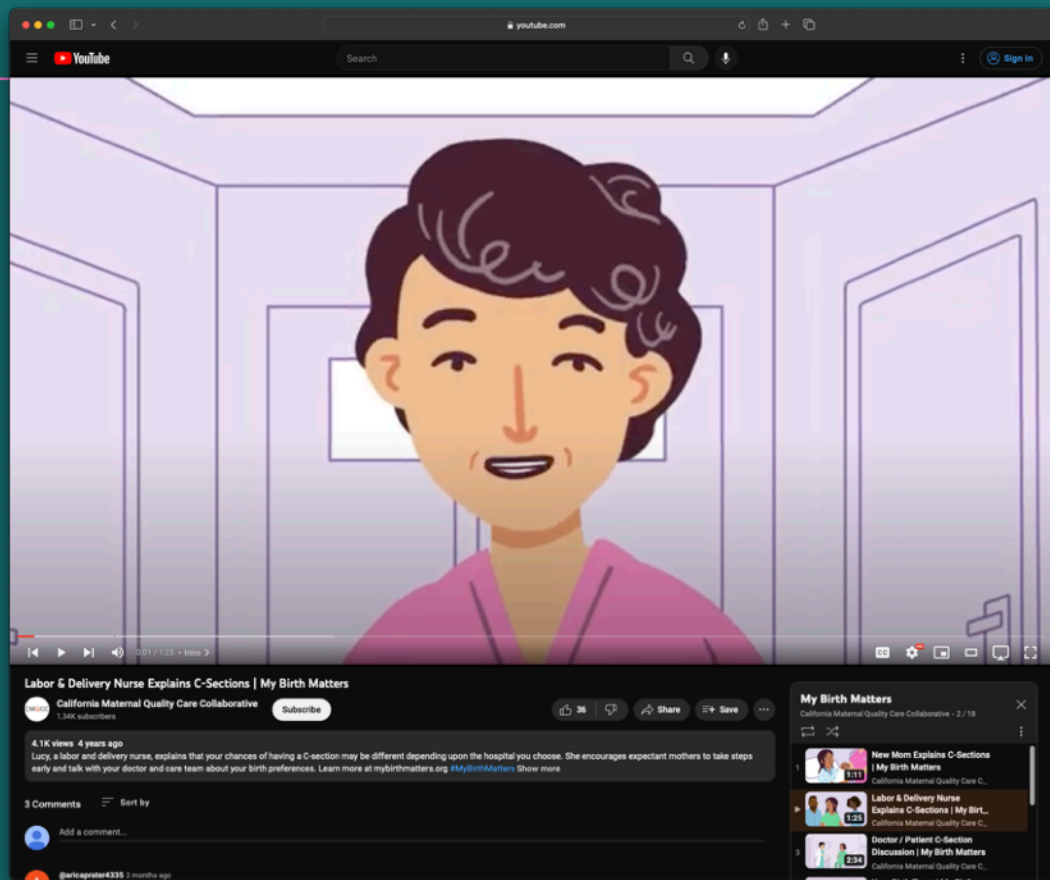
If You Are Planning to Breastfeed After Your Cesarean Birth:

- ☛ Try to do so within the first hour or two after birth (if you and the baby are stable).
- ☛ Ask for your partner, doula, and baby to stay with you during recovery and in the postpartum room.
- ☛ Ask for a breastfeeding specialist if you need a little extra help.
- ☛ Take the time you need to rest, sleep, or be alone.

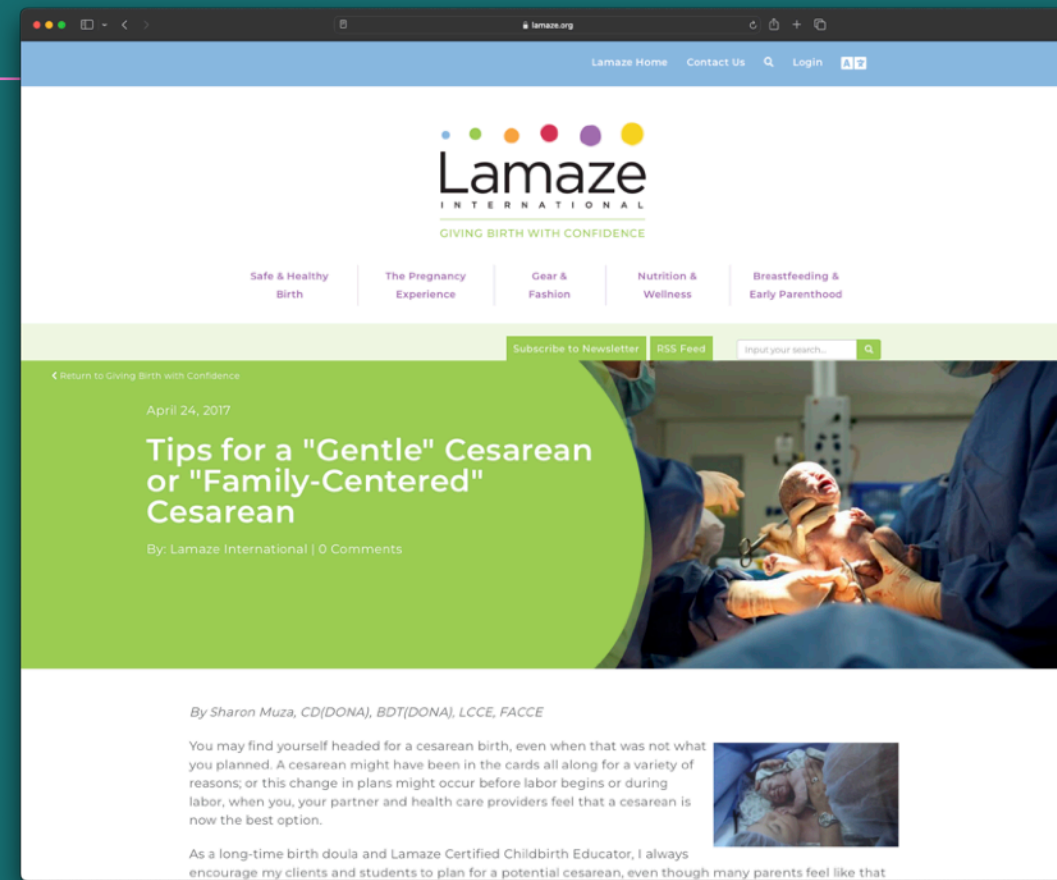
Key Points to Review:

- 👂 Find out all you can about the benefits and risks of cesarean.
- 👂 Discuss the information with your caregiver.
- 👂 You may require a routine repeat cesarean because your caregiver or hospital does not support VBAC.
- 👂 If you make an informed personal decision to have a repeat cesarean, then you can plan ahead and make your birth meaningful and empowering for you.
- 👂 You can strategize with your caregivers to have skin-to-skin and bonding time with your baby while still in the operating room (or as soon as possible after the birth).

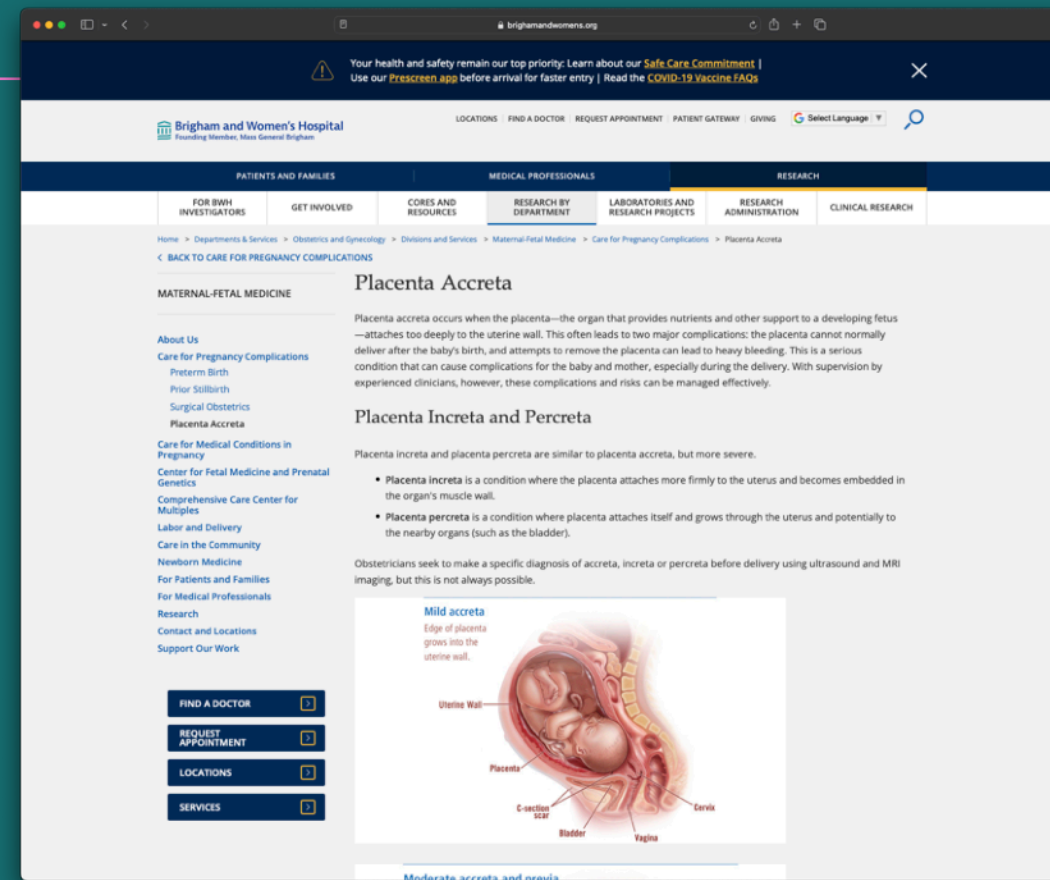
Resources



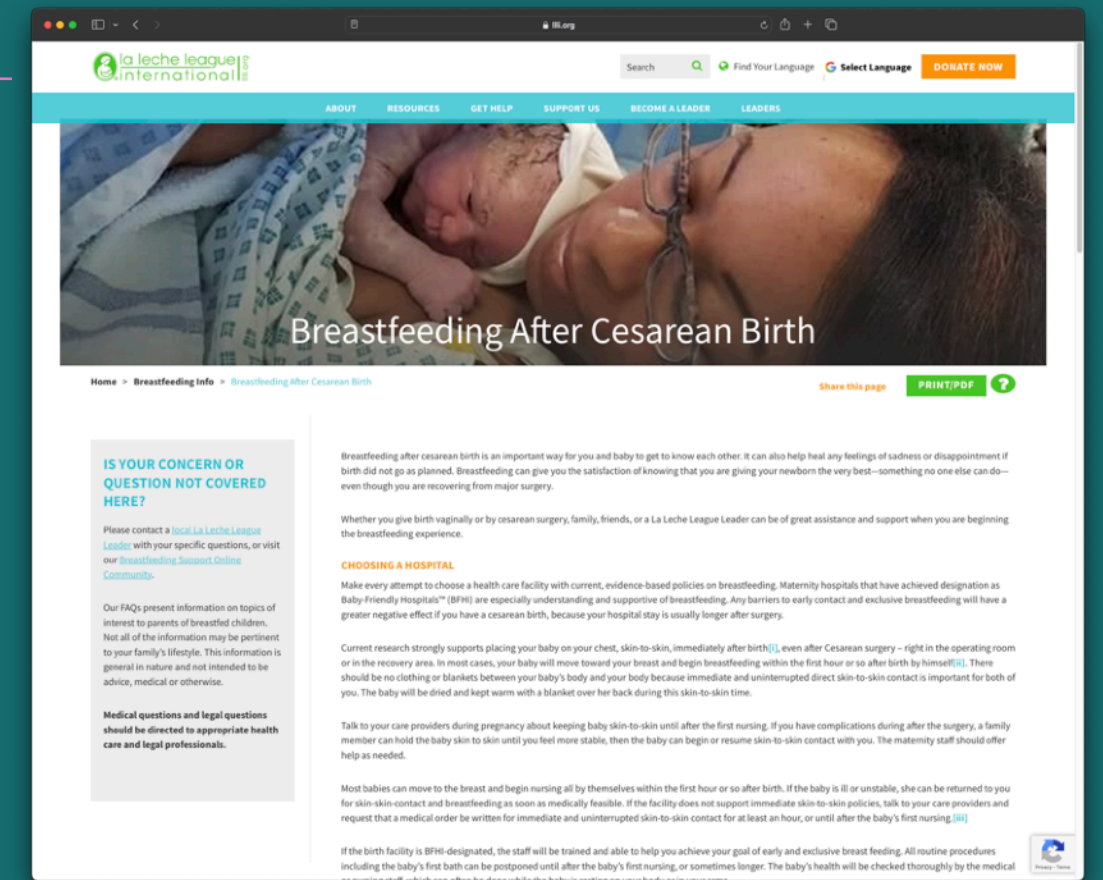
Labor & Delivery Nurse Explains C-Sections



Tips for a “Gentle” Cesarean or “Family-Centered” Cesarean



Placenta Accreta



Breastfeeding After Cesarean Birth