Plain language summary

Vaginal Birth After Caesarean Section

What is this summary about?

This is a summary of the evidence and advice relevant to women in a subsequent pregnancy who had a previous caesarean birth.

Who is this summary for?

This summary is for pregnant women that have had a previous caesarean birth who are planning their next birth either vaginally, or by repeat caesarean birth.

Definitions used in this summary:

- Booking visit – the first visit with a Doctor in the antenatal clinic
- VBAC – vaginal birth after caesarean section
- ERCS – elective repeat caesarean section
- Classical caesarean section – a midline vertical incision on the uterus (womb)
- Uterine rupture – when the layers of the uterus separate and open, often in labour, which is a major complication for the woman and the baby
- Placenta praevia – when the placenta is sited low down in the uterus and may be covering the cervix, preventing safe vaginal birth
- Placenta accreta - when the placenta has invaded deeply into the muscle layer of the uterus (womb) and will not separate naturally after birth, sometimes causing major bleeding
- Macrosomic baby – a baby that is much larger than average (>4kg or >8lb 13oz)]
- Singleton or multiple pregnancy – carrying one baby, or more than one (e/g twins)
- Third degree tear – a tear of the anal sphincter muscle
- Fourth degree tear – a tear of the anal sphincter muscle that extends into the anal canal

What will happen at the booking visit?

Women will meet with a senior obstetric Doctor in the antenatal clinic. This Doctor will take a relevant medical and obstetric history and ask questions about previous pregnancy/pregnancies and birth. They will look at previous maternity records if available, and other medical notes. This is because they want to know why someone had a previous caesarean birth and if they had any problems during or after it, which helps make decisions about the best type of birth for the current pregnancy. If a woman wishes to have a VBAC they may be referred to the hospital's VBAC clinic for some or all of the clinic visits during their pregnancy.

https://www.hse.ie/eng/about/who/acute-hospitals-division/woman-infants/clinical-guidelines/

https://www.rcpi.ie/faculties/obstetricians-and-gynaecologists/national-clinical-guidelines-in-obstetrics-and-gynaecology/

What will happen at the other antenatal visits?

Women will be seen by Midwives and/or Doctors at their antenatal visits. The woman should ideally decide on a birth plan by her second trimester and have this plan documented in her obstetric notes. An ultrasound scan during the pregnancy should confirm the location of the placenta as a previous caesarean section may have affected this.

Who is suitable to have a VBAC?

For the majority of women who have had 1 previous caesarean birth and have a singleton pregnancy at full term (>37 weeks of gestation), with a baby in head-down position, VBAC may be offered as an option.

Who should not have a VBAC?

There are times when a VBAC should not be offered. This includes when a woman had a previous classical caesarean section (when there is an up and down or vertical scar instead of across the uterus) or a previous uterine rupture, when the baby is not in head down position, and if the placenta is in an abnormal position such as a placenta praevia or accreta. If there has been previous surgery to the uterus, for example for fibroids, a VBAC may also not be appropriate. Other times a VBAC may not be recommended include when baby is in a breech position, when a baby is estimated to be very large, some twin pregnancies or if there have been 2 or more previous caesarean births. In these cases, a discussion can happen between the woman and her Obstetrician and Midwives, to discuss the options for birth.

Anyone can decline to have a VBAC, and in that case an elective repeat caesarean section should be offered.

What are the risks of a VBAC or an elective repeat caesarean section?

Women should be aware that while the majority of births are uncomplicated, there are risks to both the pregnant woman and the baby with VBAC and elective repeat caesarean section.

The risks of both VBAC and caesarean birth for the woman include hysterectomy, blood transfusion, blood clots in the leg or lung, birth injury, uterine rupture, infection of the uterus and death of the mother.

The risks to the baby include breathing problems, brain injury, admission to the neonatal intensive care unit, injury from the delivery such as a fracture, trauma to face and scalp or death of the baby.

A successful VBAC carries the lowest risk to mother and baby, but identifying the women who will have a successful and straightforward VBAC is difficult.

What risks are specific to VBAC?

Uterine rupture is the most serious risk associated with VBAC. It can cause problems for both the woman and baby and can sometimes lead to death of one or both. The rates of rupture vary from approximately 1 in every 250 women with 1 previous caesarean birth to 1 in 50 women with 2 previous caesarean births. Uterine rupture is difficult to predict and to prevent. If a woman has had a previous classical caesarean section the risk is approximately 1 in every 20 women, and that is why these women should not have a VBAC.

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With VBAC there is an increased risk of tearing the muscle in the anus (anal sphincter), which controls bowel emptying. The risk of this happening is around 8%.

While overall rates of brain injury caused by lack of oxygen during or at birth are low, there is an increased risk of this for babies born by VBAC (0.8%) than by elective repeat caesarean section (<0.01%).

What risks are specific to elective repeat caesarean section?

There is a higher risk of infection, haemorrhage, and developing a clot, with caesarean birth compared to vaginal birth. There is also a higher chance that the baby may have breathing problems in the early days of life and require admission to the special care baby unit. Multiple repeat caesarean sections are associated with increased risks of heavy bleeding, blood transfusion, placenta praevia, placenta accreta and hysterectomy. The more caesarean sections someone has, the higher the risk of these complications happening.

What are the chances of having a successful VBAC?

The chance of having a successful VBAC is around 72-75% if a woman goes into labour naturally (spontaneous labour). A woman is more likely to have a VBAC if they have had a vaginal birth before; in this case the chance of a successful VBAC can be as high as 90%. A VBAC is more likely to be successful if someone had a caesarean birth previously for a baby in the breech position.

Women are twice as likely to have a successful VBAC if they come to the hospital in spontaneous labour rather than if labour is induced.

What makes a VBAC less likely for someone?

VBAC is less likely to be successful for those who are is carrying a bigger baby, who have labour induced, who have never had a vaginal birth before, where their BMI is above 30kg/m2, or where their previous caesarean birth was for an obstructed labour. If someone has several of these factors present together, the chances of a successful VBAC may be as low as 40%.

What are the recommendations for labour in someone attempting a VBAC?

It is recommended that someone having a VBAC should give birth in a hospital with appropriate equipment for monitoring both the woman and baby in labour, and the resources to have an emergency caesarean birth, if needed. Women attempting a VBAC can have an epidural in labour for pain relief if they wish.

Women attempting VBAC should have one-to-one care, continuous monitoring of the baby in labour, and support from midwifery and obstetric staff during their labour.

Monitoring during labour in someone attempting a VBAC is to ensure a uterine rupture has not happened, and there are various other ways that uterine rupture can be detected in labour.

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Can a woman attempting VBAC have labour induced?

The most serious risk with a VBAC is uterine rupture. In spontaneous labour the risk of rupture is around 1 in every 250 women. When labour is induced this increases to approximately 1 in every 100 women. The type of induction also has an effect on the risk. If oxytocin is used the risk is around 1%. If prostaglandins are used the risk is 2%.

Mechanical methods of inductions, such as a balloon catheter, are believed to have the same risk as spontaneous labour.

What about women with 2 previous caesarean births?

For women with 2 previous caesarean births and no other reasons not to have a VBAC, it may be possible to have a VBAC. However, they should be seen by a consultant in the antenatal clinic where VBAC can be discussed in detail. These women should be aware of the increased risk of uterine rupture (1-2%) and advised that elective caesarean section is also an option. Success rates are similar to women that have had one previous caesarean section (60-70%). However, for each woman the care should be individualised as there may be other factors which impact the final decision on mode of birth.

Special considerations:

Can a woman go past her due date and have a VBAC?

For women attempting VBAC it is reasonable that a review should take place by 41+0 weeks to make a decision on birth. It is also reasonable that an ERCS could be booked for around 41+0 weeks. A plan for labour induction could also be discussed at this time.

Can a woman have a VBAC with twins?

There have not been many studies done to look at women having twins by VBAC. Success rates could be between 45-76%. A cautious approach is advised and the options should be discussed with a senior Obstetrician.

What if the baby is large or bigger than 4kg?

If the baby is more than 4kg, VBAC is less likely to be successful, there is a higher risk of uterine rupture, and a higher risk of third and fourth degree tears.

What if the baby is preterm (<37 weeks)?

A preterm baby can be delivered by VBAC, assuming there is no other reason for the woman to have a caesarean section. The outcomes for the mothers and babies in this situation are similar with VBAC and ERCS.

How should a woman be counselled after a caesarean section?

This will be different in every case, but the woman should be told:

- The reason for her caesarean birth
- How this might impact her future births
- If VBAC is an option for future births
- Ideally the Obstetrician who carried out the caesarean section should document this in her chart at the time of the consultation

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