

Clinical Reference Guide

Clinical Situation:

Previous Caesarean Section

Background:

To assist in discussions with clients who have had a previous caesarean section. The options of both VBAC and Elective repeated c/section (ERCS) will be discussed in the majority of cases.

Likelihood of	VBAC	ERCS
Successful VBAC – no history of vaginal birth	3 out of 4 or 72-75%	
Successful VBAC – at least one previous vaginal birth	Almost 9 out of 10 or 85-90%	
Uterine rupture	1:500 0.24% ****	<2 per 10,000/<0.02%
Blood transfusion	2 per 100/2%	1 per 100/1%
Maternal mortality	4 per 100,000/0.004%	13 per 100,000/0.013%
Transient respiratory morbidity	2-3 per 100/2-3%	4-6 per 100/4-6%
Antepartum stillbirth beyond 39 weeks awaiting spontaneous labour	10 per 10,000/0.1% - comparable to nulliparous women	Not applicable

**** the figure from RCOG (2015) guidance, suggests rate is 5 per 1000/0.5%/1:200 **1:500 0.24% (Fitzgerald et al, 2019)**

Planned VBAC:

- Successful VBAC has the fewest complications for the woman and baby.
- Shorter hospital stay if successful
- Uterine rupture: lower segment incision 5 in 1000 (0.5%)
 - Classical incision 20 in 1000
 - Being pregnant 2 per 1000
 - Spontaneous onset of labour 5 per 1000
 - Induced 5-14 per 1000
 - Augmented 9-19 per 1000
- Factors that potentially increase risk of rupture include; short inter-delivery interval (<12 months since last delivery), post-date pregnancy, maternal age >40 years, obesity, macrosomia.
- Delivery related perinatal death 4 per 10 000 (comparable to nulliparous women)
- Induced labour + no previous vaginal delivery + BMI≥30 + previous c/section for delay in labour 40 per 100 chance of successful VBAC
- Previous reason for c/section: fetal malpresentation 84 per 100 VBAC
 - Delay in labour 64 per 100 VBAC
 - Fetal distress 73 per 100 VBAC
- Previous c/section following failed instrumental delivery 61 per 100 VBAC
- Symptoms of rupture – 76% fetal bradycardia, 49% maternal abdominal pain, 29% vaginal bleeding

Elective repeat c/section after previous section:

- Would be advised in cases where the woman has had previous scar rupture or classical incision.
- Should be done after 39/40.
- Longer recovery after c/section
- Increased chance of abnormally implanted placenta in future pregnancies – 3.1 per 1000 one prior c/section to 23 per 1000 four previous c/sections. Chance of persistence of placenta reaching the internal os requiring caesarean 50 per 100
- Neonatal respiratory distress 4-5 per 100 6 per 100 if performed prior to 39 weeks

Where women have had 2 or more previous c/section they should be counselled by an obstetrician, but can be advised that success rate with VBAC is 71 per 100 and rupture rate is 1.36%

Assessment:

Clients who have previously had a caesarean section should be offered and recommended obstetric led care for pregnancy and birth. Dependent on which DGH they choose to be referred to they may be offered an early appointment at around 16-20 weeks to begin discussions about next mode of birth.

Should the client decline OLC for either stage she would require a Clinical Information Sharing pro-forma to be completed following full discussions about her care.

Things to also consider:

- The reason that she had a c/section last time
- Whether she has had a vaginal birth previously
- The type of incision
- Any problems with recovery
- Plans for future pregnancies after this one

Recommendation:

Provide and discuss with the woman with the RCOG 'information for you' leaflet on Birth options after previous caesarean section to aid her decision making. Ensure discussions are documented.

OLC for pregnancy and birth. Some units will support use of water with telemetry CTG.

Aromatherapy oils may be able to be used for VBAC cases. Follow aromatherapy guideline.

Should the client choose to birth in Powys the following should be considered for her care plan:

- Two midwives in attendance once established labour is confirmed.

- This may mean two midwives attending together for the initial assessment if it is thought the woman is already in established labour when she calls.
- Ensure the OTL and DGH are contacted to let them know when the woman is in labour.
- Long hand notes will need to be written throughout the labour and birth – please ensure you have a supply of continuation sheets in your bags. Suggested documentation every 15 minutes, more frequently if required. Partogram within the NLP can be used and summary boxes as normal (time of birth, 3rd stage, weight etc).
- RCOG recommends Continuous fetal monitoring.
- RCOG also recommends regular monitoring of maternal symptoms and signs. It does not state the frequency, but some areas adopt 15 minute maternal pulse to observe for early signs of tachycardia that may indicate rupture to be timed with fetal heart auscultation, to minimise intrusion.
- If choosing to birth in Powys, the woman accepts that the midwives caring for her will be working to the All Wales Low Risk Care Pathway i.e. not offering more regular auscultation of the fetal heart. 15 mins 1st stage and 5 mins 2nd stage.
- Fetal distress is potentially the first sign of uterine scar rupture, in 75% of scar ruptures the first sign was a change in the baby's heart rate. Potential to pick this up is delayed when intermittent auscultation is used.
- Discuss transfer rates to DGH and potential waiting times for ambulance as you would with any case as well as main reasons for transfer. We would be advising transfer if there are any abnormalities and would have a low threshold for suggesting this in this instance. We would not offer ARM for delay in labour.

Discuss the signs and symptoms of uterine rupture or dehiscence:

- Loss of station of presenting part on vaginal examination
- Cessation of previously efficient uterine contractions
- Failure to progress – especially secondary arrest of labour
- Maternal tachycardia, hypotension, fainting or shock
- Severe abdominal pain, especially if persisting between contractions
- Acute onset of scar tenderness
- Abnormal vaginal bleeding
- Haematuria
- Change in abdominal contour

References:

Fitzpatrick KE, Kurinczuk JJ, Bhattacharya S, Quigley MA. (2019) Planned mode of delivery after previous cesarean section and short-term maternal and perinatal outcomes: A population-based record linkage cohort study in Scotland PLOS Medicine. Published online 24 September 2019

Fitzpatrick KE, Kurinczuk JJ, Alfirevic Z, Spark P, Brocklehurst P, Knight M (2012) Uterine Rupture by Intended Mode of Delivery in the UK: A National Case-Control Study PLoS Med 9(3): e1001184.
doi:10.1371/journal.pmed.1001184

RCOG (2015) Birth after previous caesarean birth Green top guideline No 45
www.rcog.org.uk