University Hospitals Sussex
NHS Foundation Trust

Vaginal Birth after Caesarean Section (VBAC)

Maternity Protocol: MP034

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Guideline Reviewer:	Heather Brown
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Amended Dates:	MP001 Provision and Schedule of Antenatal Care
Cross Referenced Protocols:	MP032 Rupture of Membranes MP033 Induction of Labour MP037 Fetal Heart Monitoring MP041 Delay in Labour and use of Oxytocin MP050 Caesarean Section (LSCS)

Contents

Key Principles

A protocol is a set of measurable, objective standards to determine a course of action. Professional judgement may be used in the application of a protocol.

Scope

This protocol applies to:

All women/people who have had a prior caesarean section and are considering VBAC.

Responsibilities

Midwives and Obstetricians:

- To access, read, understand and follow this guidance
- To use their professional judgement in application of this guidance

Management Team:

- To ensure the protocol is reviewed as required in line with Trust and National recommendations
- To ensure the protocol is accessible to all relevant staff
- To ensure protocols are available to service users on request

1 Introduction

The management of Vaginal Birth after Caesarean Section (VBAC) and the risk associated with vaginal birthand Elective Repeat Caesarean Section (ERCS). Women's preferences and priorities will be paramount in decisions related to mode of birth. In general all women who have had an uncomplicated previous caesarean section will be able to consider VBAC.

1.1 Contraindications for VBAC

- Previous Classical Incision
- Previous Uterine rupture
- ≥ 3 previous LSCS

1.2 Special Considerations

- VBAC may be considered for women/people with 2 previous caesarean sections if the two previous caesarean sections have been uncomplicated.
- Previous extension of transverse uterine incision

2 Responsibilities of Relevant Staff Groups

2.1 **Lead professional (Consultant Obstetrician)**	• To give evidence-based information regarding: ➢ Mode of birth ➢ Place of birth ➢ Benefits and potential complications of each option • To discuss fully the options with a person and made an appropriate and agreed plan of care. • To refer onto other professionals as appropriate – ➢ Consultant Midwife ➢ PNMH Service ➢ Anaesthetists
2.2 **Community Midwives**	• To book in line with Maternity Protocol MP001: Provision and Schedule of antenatal care • To discuss mode of birth / location for birth and provide information verbally as well as highlighted sources of additional information (website and leaflets) • To complete the VBAC proforma on Badgernet Refer to the Birth Options clinic to discuss and birth options including ELRCS (see Appendix B). • To provide antenatal care in line with Maternity Protocol MP001: Provision and Schedule of antenatal care • To make additional referrals as determined by clinical presentations

2.3 Anaesthetists	• Review women/people with anaesthetic risk factors in the Anaesthetic High Risk clinic including anxieties related to the previous CS anaesthetic Communication with relevant colleagues for complex CS
2.4 Consultant Midwives	• Point of referral for woman & people and any member of the Multi disciplinary team • To discuss birth / labour options in light of evidence available and Trust protocols • To assist with care planning where there are concerns about woman & people birthing out of guidance. • To support midwifery staff providing care to women/people • To act as an advocate for women/people • To disseminate information/ agreed care planning appropriately amongst hospital colleagues and women/people

3 Antenatal Management

3.1 Consultant Obstetrician Led care within the Birth Options Clinic and pathway.

3.2 Booking:

Community midwife at booking should refer women/people who have had one or two uncomplicated caesarean births to the Birth Options clinic. It should be explained that the role of the Birth Options clinic is to enable and facilitate plans for the birth that are in line with the woman/person's priorities and preferences and in line with evidence based clinical care.

4 Discussion and Documentation of Plan

4.1 **All women/people with previous Caesarean Section**:

4.1.1 Should have a documented discussion about their mode and place of labour / birth during the antenatal period with a focus on their preferences and priorities

4.1.2 Should be informed how to access the VBAC information

4.1.3 The following women/people should be able to discuss the option of a planned VBAC[3]:

- one or two previous uncomplicated LSCS(s)
- Singleton pregnancy, cephalic presentation
-
- no contraindications to vaginal birth

4.1.4 All discussions and decisions should both be documented by the health professional facilitating discussions in Badgernet

4.2 **Planned VBAC**

Refers to any person who has experienced a prior caesarean birth who plans to have a vaginal birth rather than by ERCS (elective repeat caesarean section)

4.3 **Discussion / Information to be provided**

<table>
<tr><td>4.3.1

Chances of success</td><td colspan="2">• overall the likelihood/chances of a successful planned VBAC are 70-75%
• this may be affected by the indication for the previous C/S.</td></tr>
<tr><td>4.3.2

General considerations</td><td colspan="2">• Focus on individual preferences and priorities
• Further babies planned</td></tr>
<tr><td>4.3.3

Place of birth</td><td colspan="2">• Hospital birth is recommended if the person chooses to opt for a home birth, they should be referred to the Consultant Midwives.</td></tr>
<tr><td rowspan="7">4.3.4

Risks / benefits[3]</td><td colspan="2">• Risks and benefits are to be discussed in line with NICE Guidance 2021 and with a focus on the woman/persons priorities and preferences.</td></tr>
<tr><td colspan="2">Risks of VBAC</td></tr>
<tr><td>Uterine rupture</td><td>0.5% (1 in 200)</td></tr>
<tr><td>Blood transfusion or endometritis</td><td>1% additional risk</td></tr>
<tr><td>Birth-related perinatal death</td><td>2-3/10,000 (VBAC)
1 / 10,000 (ERCS)</td></tr>
<tr><td>Infant developing hypoxic ischaemic encephalopathy (HIE)</td><td>8 /10,000</td></tr>
<tr><td colspan="2">Benefits of VBAC</td></tr>
<tr><td colspan="2">• VBAC reduces risk of baby having respiratory problems at birth
• Greater chance of uncomplicated births in future</td></tr>
</table>

	pregnancies • Shorter recovery period due to avoiding complications associated with surgery • Shorter stay in hospital • No restrictions on driving and lifting
	Potential complications of ERCS
	• ERCS may increase the risk of serious complications in future pregnancies • Repeat surgery carries a higher risk of bladder and bowel damage • Increase in adhesions can make surgery more difficult • Longer stay in hospital and longer recovery period • Restricted mobility and ability to drive and lift. • Increased chance of requiring a blood transfusion and experiencing thrombosis • Increased possibility of placental accreta and placenta praevia in future pregnancies

5 Documentation

The following should be documented in Badgernet on the VBAC section

5.1 The eligibility for VBAC and woman/person's preferences and priorities

5.2 Hospital birth is recommended Continuous electronic fetal monitoring is recommended once in established labour. This includes telemetry.

5.3 An individualised management plan should be discussed and documented and include:

- If labour commences early, especially prior to a planned CS
- If the waters break prior to labour

5.4 There should be a documented plan for labour should this not commence as planned (e.g. if pregnancy is over 40 weeks gestation), that has been discussed with the with a Consultant Obstetrician and documented in the maternal notes

6 40 weeks and Induction of Labour (IOL)

- Community midwives to offer a membrane sweep if the pregnancy is over 40 weeks gestation and no additional risk factors Appendix F.
- 41 week Birth Options appointment with Birth Option Lead Midwife/obstetrician to discuss IOL or an ELRCS. The risks and benefits of both ELRCS and IOL should be discussed and should include a focus on the individuals preferences and priorities. In addition the increased risk of uterine scar dehiscence should be described;1.5 fold increase when compared to spontaneous VBAC
- IOL methods include cervical sweeps, ARM and oxytocin.
  Dinoprostone is not recommended for IOL with a previous CS due to the increased likelihood of scar dehiscence
  Admit for IOL at 40+7 with an obstetrics review Interval between ARM and commencing oxytocin (usual regimen for first stage oxytocin) 4-6 hours
  Continuous electronic fetal monitoring is essential with oxytocin use

6.1 Pre labour Spontaneous Rupture of Membranes (SROM)

6.1.1 Women/people planning VBAC with pre labour spontaneous rupture of membranes should be advised to attend the maternity unit as soon as possible and have a review, CONFIRM OR EXCLUDE SROM, perform CTG and the expected maternal observations (see *MP032 Rupture of Membranes* for details) undertaken by a midwife. All women/people should then be reviewed by the Obstetric Registrar and a plan of care discussed and agreed with the person which is then documented in the maternal notes. If person/pregnancy is low risk (other than a previous caesarean section), and she is not having uterine contractions, she should be supported to go home and await events with the usual advice of checking their temperature, avoiding intercourse, observing fetal movements and PV loss and to call the Maternity Unit if feel unwell, any concerns (including pain and bleeding). Once contractions become regular and moderate in strength women/people should call the maternity unit and be advised to come in. This will be earlier than for women/people who have not had a previous caesarean section in order to have electronic fetal monitoring. A documented plan should be made for Induction of labour 24hrs after RoM as per usual recommended care plan for pre labour RoM (for details of timings and process refer to *Maternity Protocol MP032 Rupture of Membranes*).

6.1.2 Women/people should be made aware that the risk of uterine scar rupture increases by 1.5 fold with induction of labour.

6.1.3 if additional risk factors are present women/people should be advised to stay in the maternity unit and a plan of care made and documented by the Obstetric Registrar. The discussion on risks and benefits of IOL should focus on the individuals preferences and priorities and include the increased risk of scar dehiscence (1.5 fold as compared to spontaneous VBAC)

7 Intrapartum Care

7.1 On admission the woman/person should have a comprehensive plan documented for labour and the obstetric team should be aware of the admission

7.2 Continuous electronic fetal monitoring is recommended. This includes telemetry

7.3 The partogram should be commenced as soon as labour is established

7.4 Take blood for Hb and Group & Save

7.5 IV cannula only if difficulties with venous access are anticipated eg raised BMI

7.6 In established labour consider the use of the wireless CTG to aid mobility.

7.7 Women/people who decline continuous monitoring

7.7.1 This should have ideally been discussed antenatally with consultant and senior midwife input

7.7.2 The benefits of continuous monitoring should be clearly explained and documented and women/people should be made aware that there is limited data on the safety of other forms of monitoring in VBAC.

7.7.3 If a person declines monitoring when she presents in labour the consultant obstetrician and senior midwife should be involved. It may be necessary to contact the Consultant Midwife

7.8 Encourage mobilisation

7.9 Light diet

7.10 Omeprazole 20mg twice daily

7.11 Ensure analgesic needs are addressed

7.12 Signs of scar dehiscence:

- Abnormal CTG – early sign is fetal tachycardia
- Maternal tachycardia
- Vaginal bleeding
- Loss of station of presenting part
- Acute onset of scar tenderness

- Chest pain
- Shoulder Tip Pain
- Cessation of previous efficient uterine activity
- Poor / incoordinate uterine activity
- Acute onset of haematuria
- Severe lower abdominal pain especially in between contractions

7.13 Vaginal examinations as per usual If delay in the first stage, inform the middle grade who should review progress and discuss with the consultant before commencing Oxytocin.

8 VBAC and Use of the Birthing Pool

8.1 A number of women/people planning a VBAC may wish to use the pool. See Maternity Protocol MP039 Waterbirth for further information / guidance

8.2 Each Labour Ward has telemetry (a wireless CTG machine) that can be used underwater in the pool. We recommend continuous fetal monitoring with this machine whilst using the pool.

8.3 If the wireless CTG machine is not available then women/people should be advised that we would not recommend the use of the pool as we would not be able to continuously monitor fetal wellbeing

9 Monitoring Compliance

Please refer to the Monitoring and Auditing document for details on monitoring compliance for this protocol.

10 References

1) National Institute for Health and Clinical Excellence - NICE. (2021). *Caesarean Section:* Guidance (CG132). Available at: *www.nice.org.uk/guidance/cg132*

Appendix - Benefits and Risks of Vaginal Birth after Caesarean Section (VBAC)compared to ERCS

	Planned VBAC	ERCS from 39+ Weeks
Maternal Outcomes	• If Successful a shorter stay and recovery. • Approximately 0.5% risk of uterine scar rupture. If occurs, associated with maternal morbidity and fetal morbidity/mortality. • Increased likelihood of future vaginal birth. • Risk of anal sphincter injury in women/people undergoing VBAC is 5% and birthweight is the strongest predictor of this. • Risk of Maternal death with planned VBAC is 4/100000 (95% CI 1/100000 to 16/100000) • 72-75% chance of successful VBAC. • The rate of instramental delivery is also increased up to 39%.	• Longer stay and recovery. • Virtually avoids the risk of uterine rupture (actual risk is extremely low, less than 0.02%). • Future pregnancies – likely to require caesarean delivery. • Increased risk of placenta previa/accreta and adhesions with successive caesarean deliveries/abdominal sergery. • Risk of maternal death with ERCS of 13/100000 (95% CI 4/100000 to 42/100000). • Able to plan a known delivery date in selected patients. This may however change based on circumstances surrounding maternal and fetal wellbeing in the antenatal period. • Reduces the risk of Pelvic organ prolapse and urinary incontinence in comparison with number of vaginal birth (dose-response effect) at least in the short term. • Option for sterilisation if fertility is no longer desired. Evidence suggests that the regret rate is higher and that the failure rate from sterilisation assiciated with pregnancy may be higher than that from an interval procedure. If sterilisation is to be performed at the same time as a ERCS, counselling and agreement should have been given at least 2 weeks prior to the procedure.

Infant Outcomes	• 8 per 10000 (0.08%) risk of hypoxic ischaemic encephalopathy (HIE) • Risk of transient respiratory morbidity of 2-3% • 10 per 10000 (0.1%) prospective risk of antepartum stillbirth beyond 39 weeks while awaiting spontaneous labour (similar to nulliparous women/people). • 4 per 10000 (0.4%) risk delivery-related perinatal death. This is comparable to the risk for nulliparous women/people in labout.	• <1 per 10000 (<0.01%) risk of delivery-related perinatal death or HIE. • Risk of transient respiratory morbidity of 4-5% (6% risk if delivery performed at 38 instead of 39 weeks). The risk is reduced with antenatal corticosteriods, but there are concerns about potential long-term adverse effects.

The estimate of risk for adverse maternal or fetal events in VBAC are based on women/people receiving continuous eectronic monitoring during their labour.