Sherwood Forest Hospitals
NHS Foundation Trust

TITLE: PREGNANCY AND CHILDBIRTH FOLLOWING CAESAREAN SECTION GUIDELINE

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	Name the documents here or record not applicable
Associated Policy	N/A
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Associated Standard Operating Procedure(s)	N/A
Other associated documents e.g. documentation/ forms	N/A

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CONTENTS

1 INTRODUCTION / BACKGROUND

There is widespread public and professional concern about the increasing proportion of births by caesarean section. Increasing rates of primary caesarean section have led to an increased proportion of the obstetric population who have a history of prior caesarean delivery. Pregnant women with a previous section may be offered either planned Vaginal Birth after Caesarean (VBAC) or Elective Repeat Caesarean Section (ERCS). The proportion of women who decline VBAC is, in turn, a significant determinant of overall rates of caesarean birth. Women considering their options for birth after a single previous caesarean should be informed that, overall, the chances of successful planned VBAC are 72–75%.[5]

Consideration of mode of birth is also required in women who have other uterine scars, such as following myomectomy, hysterotomy, perforated uterus, and metroplasty. The NICE Guideline 'Caesarean Section'3 recommends that women should be offered written information and the opportunity for a full discussion regarding the risks and benefits of vaginal birth after Caesarean section compared with a repeat Caesarean section.

Prior to undertaking any examinations, treatment and care clinicians must ensure that the appropriate consent has been gained. Where relevant the associated documentation must be completed (e.g. consent forms) or the information recorded in the records. For further information see the Trust's "Consent Policy".

2 AIM/ OBJECTIVES/ PURPOSE (including Related Trust Documents)

The aim of this guideline is to provide support for support for women who are planning a birth following a previous caesarean section.

This clinical document applies to:

Staff group(s)
- Midwives
- Obstetricians

Clinical area(s)
- Community
- Antenatal Clinic
- Pregnancy Day Care
- Maternity Ward
- Sherwood Birthing Unit

Patient group(s)
- Women who are pregnant and have had a previous caesarean section

Related Trust policies, guidelines or other Trust documents
- Maternity Guidelines as appropriate

3 GUIDELINE DETAILS (including Flowcharts)

3.1 Management of the antenatal period 4,5,6

Mode of delivery

The woman should be booked for Maternity Team Care and reviewed in the Antenatal Clinic by the Consultant responsible for her care or a senior Obstetrician early in her pregnancy to allow adequate antenatal preparation and discussion of mode of delivery. This discussion must be documented in the woman's hand-held records and on the electronic maternity pathway.

Information to be considered during decision-making:

- Indication for previous Caesarean section
- Maternal preferences
- Events of the current pregnancy

Counselling, 7

Benefits of VBAC	***Benefits of ERCS***
• Avoids risk of operative damage to adjacent organs (bladder, bowel) • Avoids repeated caesarean sections in future pregnancies • Reduced risk of general infection and blood loss at and following delivery • Less risk of respiratory problems for baby • Quicker recovery / shorter stay in hospital • Less post-delivery pain • Chance of successful VBAC is 72-75% and this increases to 85-90% for previous vaginal birth	• Knowing the date and mode of delivery • Avoid the risk of scar rupture and emergency caesarean section • Avoids risk of perineal tears • Avoids labour pain

Risks of VBAC	***Risks of ERCS***
• Risk of uterine rupture of 2-7 / 1,000 • Risk of emergency caesarean section • Around 1% addition risk of either blood transfusion or endometritis if emergency caesarean section	• Serious risks for future pregnancy, e.g. placenta praevia and accreta • Injury to bladder, bowel or ureter; ileus • Hysterectomy • Longer recovery period and increased duration of hospital stay • Need for post-operative ventilation / neonatal unit admission for the baby

3.2 Place of birth

Women should be advised that planned VBAC should be conducted in a suitably staffed and equipped delivery suite, with continuous intrapartum care and monitoring and available resources for immediate caesarean section and advanced neonatal resuscitation. This discussion and an agreed plan for place of delivery should be documented in the woman's hand-held records and on the electronic maternity pathway.

3.3 Planned VBAC in special circumstances

Women who are preterm and considering the options for birth after a previous caesarean should be informed that planned preterm VBAC has similar success rates to planned term VBAC but with a lower risk of uterine rupture.

A cautious approach is advised when considering planned VBAC in women with twin gestation, fetal macrosomia and short inter delivery interval, as there is uncertainty in the safety and efficacy of planned VBAC in such situations.

Women with a prior history of two uncomplicated low transverse caesarean sections, in an otherwise uncomplicated pregnancy at term, with no contraindication for vaginal birth, who have been fully informed by a Consultant Obstetrician, may be considered suitable for planned VBAC.

3.4 Documentation/Individualised Management Plan

A final decision for mode of birth should be agreed between the woman and her obstetrician before the expected/planned delivery date (ideally by 36 weeks of gestation).

The woman should be advised of the recommendations for continuous electronic fetal monitoring[5] and IV access in active labour. She should also be advised that epidural analgesia is not contraindicated[5]

An individual management plan for labour, including fetal monitoring and the plan if labour commences early prior to a planned ERCS, must be documented in the intrapartum section of the woman's combined hand-held records and on the electronic maternity pathway.

3.5 Contraindications to VBAC

Women with a prior history of one classical caesarean section are recommended to give birth by ERCS.

Women with a previous uterine incision other than an uncomplicated low transverse caesarean section incision who wish to consider vaginal birth should be assessed by a consultant with full access to the details of the previous surgery.

There is limited evidence on whether maternal or neonatal outcomes are significantly influenced by the number of prior caesarean births or type of prior uterine scar. Nonetheless, due to higher absolute risks of uterine rupture or unknown risks, planned VBAC is contraindicated in women with:

- previous uterine rupture- risk of recurrent rupture according to limited observational data 5% or higher[5]
- previous high vertical classical caesarean section (200–900/10,000 risk of uterine rupture) where the uterine incision has involved the whole length of the uterine corpus.
- Insufficient evidence to support safety of VBAC in previous inverted T or J shaped, low verticle uterine incision [5]
- three or more previous caesarean deliveries (reliable estimate of risks of rupture unknown).

It is recognised that, in certain extreme circumstances (such as miscarriage, intrauterine fetal death) for some women in the above groups, the vaginal route (although risky) may not necessarily be contraindicated.

3.6 Management of the intra-partum period

Spontaneous labour is associated with the highest rates of successful VBAC.
Induction of labour should therefore be reserved for clear obstetric indications.

Labour should be managed on Sherwood Birthing Unit. If the woman chooses not to follow this advice and requests a home birth, then referral to the Consultant Obstetrician responsible for her care must be made to allow further discussion. This discussion must be documented in the woman's hand-held records and on the electronic maternity pathway.

3.7 Established labour

Once admitted in labour, the woman should be reviewed by the obstetric team and a clear management plan documented, referring to the management plan
Continuous electronic fetal monitoring should be commenced. The use of telemetry can aid with the woman's mobility as long as continuous monitoring can be achieved with this technique.

IV access should be secured as well as taking blood for a 'group and save' and full blood count.

Progress in labour must be monitored carefully to ensure adequate progress and any decision to augment the labour with oxytocin must be discussed with the patient and Consultant Obstetrician, with a clear management plan documented in the intra-partum notes.

Fetal blood sampling, if indicated due to an abnormal fetal heart rate trace, can be undertaken if scar rupture is thought to be unlikely (after clinical assessment).
Any episodes of vaginal bleeding, maternal tachycardia or scar tenderness should be reported to the obstetrician.

3.8 Scar dehiscence/uterine rupture

Early diagnosis of uterine scar rupture followed by expeditious laparotomy and resuscitation is essential to reduce associated morbidity and mortality in mother and infant.

There is no single pathognomic clinical feature that is indicative of uterine rupture but the presence of any of the following peripartum should raise the concern of the possibility of this event:

- abnormal CTG
- severe abdominal pain, especially if persisting between contractions
- chest pain or shoulder tip pain, sudden onset of shortness of breath
- acute onset scar tenderness
- abnormal vaginal bleeding or haematuria
- cessation of previously efficient uterine activity
- maternal tachycardia, hypotension or shock
- Loss of station of the presenting part.

The diagnosis is ultimately confirmed at emergency caesarean section or postpartum laparotomy.

3.9 Elective Repeat Caesarean Section

If the woman opts for ERCS, this should be arranged for no earlier than 39 completed weeks (in the absence of other clinical indications) to minimize the risk of neonatal respiratory complications – see Caesarean Section Guideline

3.10 Labour prior to ERCS

As up to 10% of women scheduled for ERCS go into labour before the 39th week, it is good practice to have a plan for the event of labour starting prior to the scheduled date. This should be documented in the woman's hand-held records, on the electronic maternity pathway and on the 'Previous Caesarean section' proforma (see appendix 1).

If the woman presents in early labour before elective caesarean section, the on call obstetric team should be informed. They should:

- Discuss the option of VBAC if no other contraindications are present
- Refer to the hand held records and electronic pathway for antenatal discussion and documented plan
- Inform on-call consultant
- If CS is indicated or opted for by the woman, the urgency of the CS will depend upon the stage of labour and any threat to maternal or fetal well-being

3.11 Induction of Labour

Induction of labour in women planning a VBAC should be reserved for clear obstetric indications.

Women should be informed of the two- to three-fold increased risk of uterine rupture and around 1.5-fold increased risk of caesarean section in induced and/or augmented labours compared with spontaneous labours.

Women should be informed that there is a higher risk of uterine rupture with induction of labour with prostaglandins.

The decision to induce, the method chosen, the decision to augment with oxytocin, the time intervals for serial vaginal examination and the selected parameters of progress that would necessitate and advise on discontinuing VBAC should be discussed with the woman by a Consultant Obstetrician and documented clearly in the woman's hand-held records, on the electronic maternity pathway and on the 'Previous Caesarean section' proforma (see appendix 1)

The decision to use prostaglandin for IOL must be made by the Obstetrician responsible or by the on call Consultant if appropriate. The maximum dose of prostaglandins and use of oxytocin must be specified and an individual management plan in the event of failed IOL should be documented in the intra-partum notes. It should be considered whether the induction should be carried out on Sherwood Birthing Unit.

4 EVIDENCE BASE/ REFERENCES

1. RCOG. National Sentinel Caesarean Section Audit Report. RCOG Clinical Effectiveness Support Unit. 2001.
2. Penna L 'Management of the scarred uterus in subsequent pregnancies' Current Obstet Gynaecol 2003;13:173-178.
3. NICE. Caesarean Section. NG 192,2021.
4. Ball E, Hinshaw K 'Review: The current management of vaginal birth after previous caesarean section' The Obstetrician and Gynaecologist 200;9:77-82.
5. RCOG 'Birth after previous caesarean birth' 2015. Green Top Guideline No. 45.
6. Martel MJ, MacKinnon CJ Clinical Practice Obstetrics Committee of the Society of Obstetrics and Gynaecologists of Canada. 'Guidelines for vaginal birth after previous caesarean birth' J Obstet Gynaecol Can 2004; 26:660-686.
7. Hannah ME, Hannah WJ, Hewson SA, Hodnett ED, Saigal S, Willian A 'Planned caesarean section versus planned vaginal birth for breech presentation at term: a randomised multicentre trial' Term Breech Trial Collaborative Group. Lancet 2000;356:1375-1383.
8. RCOG 'The Use of Electronic Fetal Monitoring' RCOG Clinical Effectiveness Support Unit. Evidence Based Guideline Number 8. 2001
9. Rowbottom SJ et al. 'Uterine rupture and epidural analgesia during trial of labour' Anaesthesia 1997;52:486-488

5 EDUCATION AND TRAINING

No education or training is required for the implementation of this guideline.

6 MONITORING COMPLIANCE AND EFFECTIVENESS

A prospective audit of 10% of women who have had a vaginal birth after caesarean section will be carried out every 3 years.

The audit report with conclusions, recommendations and an action plan will be submitted to the Maternity and Gynaecology Clinical Governance group where the action plan will be monitored.

Auditable Standards

1. Documented antenatal discussion on mode of delivery
2. Documented plan for place of delivery
3. Documented individual management plan for labour
4. Documented plan for labour should this commence early
5. Documented plan for labour should this not commence as planned, that has been discussed with a Consultant Obstetrician
6. Documented plan for monitoring the fetal heart in labour

7 EQUALITY IMPACT ASSESSMENT

- Guidance on how to complete an Equality Impact Assessment
- Sample completed form

Name of service/policy/procedure being reviewed: Pregnancy and childbirth following caesarean section guideline			
New or existing service/policy/procedure: Existing			
Date of Assessment: May 2021			
For the service/policy/procedure and its implementation answer the questions a – c below against each characteristic (if relevant consider breaking the policy or implementation down into areas)			
Protected Characteristic	a) Using data and supporting information, what issues, needs or barriers could the protected characteristic groups' experience? For example, are there any known health inequality or access issues to consider?	b) What is already in place in the policy or its implementation to address any inequalities or barriers to access including under representation at clinics, screening?	c) Please state any barriers that still need to be addressed and any proposed actions to eliminate inequality
The area of policy or its implementation being assessed:			
Race and Ethnicity:	None	N/A	N/A
Gender:	Female only	N/A	N/A
Age:	None	N/A	N/A
Religion:	None	N/A	N/A
Disability:	None	N/A	N/A
Sexuality:	None	N/A	N/A
Pregnancy and Maternity:	None	N/A	N/A
Gender Reassignment:	None	N/A	N/A
Marriage and Civil Partnership:	None	N/A	N/A
Socio-Economic Factors (i.e. living in a poorer neighbourhood / social deprivation):	None	N/A	N/A
What consultation with protected characteristic groups including patient groups have you carried out? None			
What data or information did you use in support of this EqIA? None			
As far as you are aware are there any Human Rights issues be taken into account such as arising from surveys, questionnaires, comments, concerns, complaints or compliments? None			

Level of impact From the information provided above and following EqIA guidance document please indicate the perceived level of impact: Low Level of Impact For high or medium levels of impact, please forward a copy of this form to the HR Secretaries for inclusion at the next Diversity and Inclusivity meeting.

Name of Responsible Person undertaking this assessment:
Signature: Sharon Tao
Date: May 2021

8 APPENDICES

- Appendix A – Counselling for women after previous caesarean birth – guide
- Appendix B – Birth Choices after Caesarean Section Proforma

Appendix A

COUNSELLING FOR WOMEN AFTER PREVIOUS CAESAREAN BIRTH

In the absence of relevant complications, VBAC should be offered to every woman who has had one previous transverse lower segment caesarean section. Review previous caesarean section to determine indication and type of caesarean section.
Information leaflet should be given and discussed
Planned VBAC is contraindicated in 1. previous uterine rupture 2. Previous classical section 3. 3+ previous caesarean deliveries 4. Any other contraindication for vaginal delivery eg. placenta previa
Multiple pregnancy, fetal macrosomia, post-dates pregnancies, diabetes, preterm are not contraindications to VBAC. Overall chances of successful planned VBAC is 75% Previous vaginal birth is associated with 90% planned VBAC success rate
Risks of planned VBAC • small increased risk of blood transfusion and endometritis compared to ERCS (1% increase) • uterine rupture risk of 0.5% Recurrent rupture risk unknown.1% risk rupture after classical. • 0.2%, risk of infant developing HIE (same as with first labour). ERCS risk is 0.1%. Most risk associated with rupture. No figures on long term morbidity such as Cerebral Palsy. • respiratory problems in the baby 2-3% VBAC vs 3-4% ERCS
ERCS is associated with • increased risks of serious complications in future pregnancies • may be a longer more difficult operation, with longer recovery time and increased risk VTE •
Document your discussion in the Antenatal Hand Held Record and Electronic Maternity pathway.
Final decision of mode of birth agreed between the woman and an experienced Obstetrician by 37 weeks gestation. **Document agreed mode of birth in the intrapartum record.**
If ERCS, plan for the event of labour starting prior to the scheduled date should be discussed and documented in the intrapartum plan. 10% will labour prior to 39 wks
Planned VBAC- advised continuous EFM following onset of uterine contractions
Induction is associated with increased risk uterine rupture & caesarean section. Avoid prostaglandins if possible. **Document clear plan after cervical assessment.**

Appendix B - Birth Choices after Caesarean Section Proforma

Name _____
Date of birth _____
Address _____
_____
District or NHS Number _____

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Birth Choices after Caesarean Section Proforma

Documentation of discussion:

	Date & sign
VBAC successful generally in 3 out of 4 (72-75%)	
Can be as high as almost 9 out of 10 (85-90%) if at least 1 previous vaginal birth	
Likelihood of uterine rupture 5 out of 1000 (0.5%) with VBAC (<2 per 10000 or 0.02% with El C/S)	
Similar risk of infection, higher chance of needing blood transfusion with planned VBAC (2% compared to 1% for El C/S)	
Higher risk of transient respiratory morbidity in newborn with repeat El C/S (4-6 per 100 compared with 2-3/100)	
Information leaflets provided	

Discussed:

To give birth on Sherwood Birth Unit □

For continuous electronic fetal monitoring when in labour □

Need for intravenous access in labour □

Proposed Labour Management Plan:

Discussed with Consultant □

Mode of Delivery

Management plan in event of:

Preterm labour (<37/40) □VBAC □C/S

Spontaneous labour before El C/S date □VBAC □C/S □ dependent on stage of labour - see comments below*

No spontaneous labour after 41/40 □sweep □IOL □C/S

Details of IOL:
El C/S booking details:
*Additional comments:

Signature_____