NEXT BIRTH AFTER CAESAREAN SECTION (NBAC)

This LOP is developed to guide clinical practice at the Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this LOP.

1. AIM

- Appropriate management, counselling and support of a woman who has had ≥ one prior caesarean section (CS)

2. PATIENT

- Pregnant woman who has had ≥ one previous CS

3. STAFF

- Medical and midwifery staff

4. EQUIPMENT

- Nil

5. CLINICAL PRACTICE

- Discuss at booking visit:
  - reasons for previous CS
  - woman's preferences, understanding and suitability for birth options for this pregnancy
- Advise woman who has no contraindication to vaginal birth that she has the choice of attempting a vaginal birth or repeat elective CS
- Counsel against VBAC in woman who has:
  - A previous classical, vertical, upper segment, inverted T or J incision, previous hysterotomy, ≥ 3 previous caesarean sections, complex uterine surgery (including myomectomy which breached the uterine cavity) or advice from previous surgeon that VBAC should not be undertaken
  - Any maternal or fetal condition where vaginal birth is contraindicated

Woman who has had ONE previous lower segment caesarean section (LSCS)
Antenatal

- Discuss ways to optimise vaginal birth and provide the Next Birth After Caesarean (NBAC) patient information sheet (Appendix 1) at booking visit
- Review availability for referral to Midwifery Group Practice (MGP) if woman wishes
- Complete NBAC checklist in both:
  - eMaternity folder
  - paper record titled ANTENATAL CHECKLIST – SUPPORTING WOMEN IN THEIR NEXT BIRTH AFTER CAESAREAN (NBAC) SMR060.615
- Advise woman of importance of reviewing previous operation note/medical records. If not already available, RHW will need to request operation note/medical records of previous CS if performed elsewhere by communicating with the relevant hospital. This may require the woman to sign a consent form for release of medical information. If previous CS was performed overseas, ask woman if she can obtain any documentation/records
- Review previous CS operation report to see if any contraindication to vaginal birth exists
- Recommend woman with no medical/obstetric contraindications to vaginal birth after caesarean section (VBAC) is referred to the multi-disciplinary NBAC group session in the second trimester of pregnancy and following the morphology ultrasound, as outlined in Appendix 2, to receive counselling regarding the risks and benefits of VBAC or repeat CS
- Determine need for individual consultation with consultant obstetrician at time of NBAC group session (consultant obstetrician to attend group session)

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NEXT BIRTH AFTER CAESAREAN SECTION (NBAC) cont'd

- Refer woman to obstetric antenatal clinic (ANC) of planned model of care (MOC) for consultation, if unsuitable or unwilling or unable to attend NBAC group clinic
- Document medical discussion and agreed management plan in the medical record and on both NBAC checklists – eMaternity and paper record
- Refer woman back to planned MOC for ongoing antenatal care following NBAC group attendance. This should include booking Elective Repeat Caesarean Section (ERCS) if requested, and discussing plans if labour commences prior to booked ERCS date. ERCS should be booked for 39^{+0}-39^{+6} weeks gestation, unless other obstetric indication requires earlier delivery
- Recommend twice weekly vaginal examinations for stretch and sweep of cervix from 38 weeks gestation, to optimize chance of spontaneous labour, if woman is planning attempt at VBAC
- Continue with planned MOC until 39 weeks
- Refer at 39-40 weeks for 1:1 clinic appointment with NBAC clinic obstetrician or MGP designated obstetrician to discuss risks, benefits and options of induction of labour (IOL) or repeat ERCS as an end point if spontaneous labour does not occur by 41 weeks.
- Ensure discussion and counselling for IOL includes:
  - Timing of IOL for woman attempting VBAC. This should be booked for weekdays when hospital is fully operational. It should be booked on weekends only at the discretion of the weekend consultant obstetrician
  - Cervical preparation with balloon catheter, if required
  - Artificial rupture of membranes (ARM) ± wait for up to 24 hours whilst admitted to ward
  - Contraindication of prostaglandin use for woman attempting VBAC
  - Use of oxytocin. This may be considered to initiate labour in a fully counselled woman. If this is going to be used, it is to be commenced in the morning, preferably before 1000 hours during weekdays only. Consider oxytocin cessation once labour established and cervix is ≥6cm. After 12 hours of oxytocin, birth should be imminent
- Book IOL or ERCS at this visit
- Obtain written consent for IOL if planned, by consultant obstetrician. This consent must outline the increased risks of uterine rupture and associated maternal and fetal risks
- Complete RFA and consent for ERCS if after discussion, this is the chosen end point

Woman who has had TWO previous LSCS:

- Discuss at booking visit reasons for previous LSCS and woman's preferences for and understanding of birth options for this pregnancy
- Refer woman to NBAC group if she wishes to consider a VBAC
- Refer woman to MGP wherever possible if she is planning a vaginal birth
- Refer woman to obstetric ANC of planned model of care for consultation, if unsuitable or unwilling or unable to attend NBAC group clinic
- Document medical discussion and agreed management plan in medical record and on NBAC checklists – eMaternity and paper record
- Recommend vaginal examination for stretch and sweep of cervix from 38 weeks gestation

Labour

- Arrange one-to-one care by a midwife during labour
- Advise continuous electronic fetal heart rate monitoring (EFM) once regular uterine activity/established labour
- Advise insertion of a 16-gauge intravenous (IV) cannula and send blood for full blood count (FBC) and group and hold
- Take maternal observations in labour as per First Stage of Labour – Recognition of Normal Progress and Management of Delay LOP

NEXT BIRTH AFTER CAESAREAN SECTION (NBAC) cont'd

- Assess progress of labour regularly, considering woman's previous labour history. Recommend at least fourth hourly vaginal examination.
- Notify obstetric registrar or consultant if progress is inadequate
- Avoid prolonged labour, aiming for birth to occur within 12 hours of established labour
- Allow one hour for passive descent in second stage and one hour of active pushing if no prior vaginal birth, or 30 minutes active pushing if woman has had a previous vaginal birth. Following this time, request medical review unless birth imminent
- Observe for loss of contractions, loss of station of presenting part, continuous pain in lower abdomen between contractions, pathological fetal heart rate changes, sudden onset of vaginal bleeding, maternal hypotension and tachycardia. Notify obstetric registrar or consultant if any concerns regarding signs or symptoms of possible uterine rupture
- Do not use oxytocin for augmentation of labour (i.e. after the commencement of spontaneous contractions) as this is a contraindication in VBAC**.** Oxytocin may only be used after the agreement of the obstetric consultant on call for the initiation of labour only
- Advise woman, epidural analgesia is not contraindicated in VBAC
- Discuss with obstetric consultant role of fetal blood sampling versus CS if abnormal CTG in labour

6. DOCUMENTATION

- Medical record
- Antenatal Card
- Antenatal checklist – Supporting Women in Their Next Birth after Caesarean (NBAC) SMR060.615

7. EDUCATIONAL NOTES

- Vaginal birth rate for women attempting a VBAC is approximately 63%
- Benefits of VBAC are outlined in Appendix 1
- A woman is more likely to achieve VBAC if she:
  - has already had a previous vaginal birth
  - has had a previous LSCS for a non-recurrent reason e.g. breech or suspected fetal compromise, and not for a reason related to arrest of labour
  - goes into labour spontaneously
  - has cervical dilatation >4cm on admission to hospital
  - has a normal body mass index (BMI). BMI ≥ 30kg/m^2 halves the success of VBAC
  - is motivated and has one-to-one midwifery care in labour
- Uterine rupture is associated with significant risks of both maternal and fetal morbidity or mortality
- The following are associated with an increased risk of uterine rupture:
  - Birthweight greater than 4,000g[1]
  - Induction of labour[1]
  - Maternal age >40 years of age
  - Term pregnancy (>37 weeks)[1]
  - Post-term pregnancy (>42 weeks)[1]
  - Single layer uterine closure[1]
- The risk of uterine rupture varies according to the following:
  - Spontaneous labour 5:1000[1]
  - Induced labour 15:1000[1]
  - Augmented with oxytocin 19:1000[1]
  - Inter-delivery interval of < 18 months 48:1000[11]
  - Term gestation 8:1000[10]
  - ≥ two caesarean sections 9-37:1000[7]

NEXT BIRTH AFTER CAESAREAN SECTION (NBAC) cont'd

- Perinatal mortality as a direct result of uterine rupture is 2-3:10,000 (the same risk for a nulliparous woman in labour) [1]
- The risk of neonatal death in VBAC is 4:10,000 compared with 1:10,000 for ERCS, however the numbers are small [1]
- The risk of hypoxic-ischaemic encephalopathy (HIE) in VBAC is 8:10,000 compared with virtually zero for ERCS, however again the numbers are small[1]
- The risk of hysterectomy after uterine rupture is 14-33%[1]
- An abnormal CTG is the most consistent early finding in uterine rupture and is present in 66-76% of these events, hence the importance of continuous EFM[1]

8. RELATED POLICIES / PROCEDURES / CLINICAL PRACTICE GUIDELINES

- Caesarean Birth – Maternal Preparation and Receiving the Neonate(s)
- Fetal Heart Rate Monitoring Guideline: GL2018_025 NSW Health
- ACM Guidelines for Consultation and Referral
- Sweeping Membranes to Encourage Spontaneous Labour
- Induction of Labour
- Supporting Women in their Next Birth After Caesarean Section (NBAC) Guideline: GL20014_004 NSW Health
- First Stage of Labour – Recognition of Normal Progress and Management of Delay

9. RISK RATING

- Medium

10. NATIONAL STANDARD

- Standard 5 – Comprehensive Care

11. REFERENCES

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APPENDIX 1
Patient information leaflet

NEXT BIRTH AFTER PREVIOUS CAESAREAN SECTION

Introduction:
- This information is to help you to make a choice about your next birth. Discuss this with your midwife or doctor.
- Many women who have had a previous caesarean section can safely have a vaginal birth in their next pregnancy. This is called Vaginal Birth after Caesarean, or VBAC.
- Studies have shown that up to 7 out of every 10 women with a previous caesarean can have a safe and successful VBAC.

Can I have a VBAC?
Yes - in most cases.
We advise you not to attempt VBAC if:
- you have had a previous classical (up-and-down cut in the womb) caesarean
- you have had other surgery to the upper part of your womb
- you need a caesarean section for another reason e.g. placenta praevia
- you have had a previous uterine rupture
- your baby is not coming head first
- you have had three or more caesarean sections
- it has been less than 18 months since your last caesarean section

What are the advantages of successful VBAC?
- Lower risk of:
    - Heavy bleeding
    - Blood clots in the legs or lungs
    - Other complications of surgery e.g. damage to internal organs
- Shorter hospital stay, a quicker recovery and a quicker return to normal activities (e.g. driving)
- Lower risk of problems in future pregnancies and births

What are the risks of trying for a VBAC?
- You may need a caesarean section in labour.
- Uterine rupture, meaning that the scar in the uterus tears. This happens in about 1 in 200 women having a VBAC. If this happens you will need to have an emergency caesarean
- Increased risk of blood transfusion
- In an extremely small number of cases of women attempting VBAC, the baby can die because of the uterine scar tearing. This has been estimated to occur in 1 in 2000 women attempting VBAC; the same risk of a baby dying for any woman during her first labour.

What are the advantages of elective repeat caesarean section (ERCS)?
- Timing of birth is planned for the week before your due date (39-40 weeks)
- There is much less risk of a uterine rupture

What are the risks of ERCS?
- Potential surgical complications include infection, organ injury including to bladder or bowel, increased bleeding
- Anaesthetic risks
- Surgical risks increase with the number of caesarean sections you have
- Blood clots in the leg or lung are more common
- Higher chance of complications, including placental problems, in future pregnancies (e.g. placenta praevia/accreta)

How is a VBAC labour different to my previous labour?
We recommend:
- That your baby's heart rate is monitored electronically and continuously throughout your labour.
- You have a cannula (drip) in your hand/arm in labour
- Regular assessment of labour progress by your midwife and doctor by feeling your abdomen and vaginal examination

Can labour be induced if I have had a previous caesarean section?

- This needs to be done very carefully.
- This should be discussed with your midwife and doctor.

I have had two previous caesareans. Can I have a VBAC?

- The chances of a successful VBAC following two previous caesareans are likely to be reduced when compared to women with one previous caesarean. The risks are increased. If you wish to talk about this option, please speak to your doctor or midwife.

What if my baby is bottom first (breech)?

- Having an obstetrician turn the baby around from bottom to head-first i.e. external cephalic version (ECV) is thought to be safe.
- This would be done around 37 weeks of pregnancy if you wish to have a VBAC.
- Discuss this with your midwife and doctor.

If I'm going to have an ERCS, when is the best time to have it?

- We usually book ERCS in the week before your due date (at 39 or more weeks) so that your baby and its lungs can be as mature as possible
- If you go into labour before your booked caesarean date, your midwife and doctor will discuss your options with you.

APPENDIX 2

PATHWAY FOR MULTIDISCIPLINARY NEXT BIRTH AFTER CAESAREAN (NBAC) CLINIC

Woman books at RHW 14-16 weeks gestation
Previous CS - options for next birth discussed

- Obstetric indications for repeat CS identified e.g. upper segment, J or T uterine incision, previous CS op report recommendation

OR

- has had a vaginal birth since primary CS and does not wish to attend NBAC group

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- Refer to obstetric ANC of planned model of care (MOC) for consultant review
- Continue with planned model of care.

- No obstetric indications for repeat CS
- VBAC written information given
- NBAC checklist commenced

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- Book multidisciplinary NBAC group session at 20-21 weeks gestation (after morphology ultrasound has been performed).
- If in GPSC this is in lieu of 20-week GP appt. Ask woman to book 26-week appointment with GP to obtain 28-week pathology forms
- **Advise woman NBAC appointment will take 60-90 minutes and partner/support person is welcome**

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20+ weeks gestation multidisciplinary NBAC group

- Options discussed
- Explain and document risks and benefits of VBAC and CS
- Routine ANC visit attended by NBAC midwife
- 1:1 medical review after group discussion for those who request or are identified as requiring further medical obstetric consultation

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21-39 weeks gestation

- Continue with planned model of care
- Medical consultations to occur with obstetric team for planned MOC
- If woman requests or needs a repeat CS, book via woman's planned MOC

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39-40 weeks gestation for woman planning VBAC

- Book appointment with NBAC clinic obstetrician or MGP designated obstetrician to discuss IOL or CS options if spontaneous labour does not occur by 41 weeks gestation.
- Discuss and document risks, benefits and options of IOL
- Obstetric consultant to obtain written consent if IOL chosen, and complete RFA if CS chosen.
- Book IOL or CS at this clinic