Guideline

Next Birth After Caesarean (NBAC) - Antenatal Management

1. Purpose

This document outlines the guideline details for the antenatal management of women at the Women's, who have had one previous caesarean section.

Where processes differ between campuses, those that refer to the Sandringham campus are differentiated by pink text or have the heading **Sandringham campus.**

Introduction

According to the Consultative Council on Obstetrics and Paediatric Mortality and Morbidity in Victoria the caesarean section (C/S) rate has been steadily increasing in public hospitals statewide from 21% in 2000 to 30.6% in 2008.

The most common indications for C/S are previous C/S, labour dystocia, malpresentation and non-reassuring fetal status. Repeat caesarean accounts for around 50% of all elective caesareans at the Women's. Increased VBAC uptake will decrease the overall C/S rate by 5%.

Trial of labour (TOL) should be considered as an option for all women who present for prenatal care with a history of previous caesarean birth. Where contraindications exist, a repeat C/S will be advised, but in the majority of cases successful vaginal birth can be achieved safely for both mother and baby.

Refer to the Women's procedure: Trial of Labour (TOL) – Intrapartum Management.

The success rate of TOL ranges from 55-85% for those attempting normal birth. Predictors for successful TOL include:

- Previous vaginal delivery (85-90% success rate)
- Spontaneous labour
- Dilatation of > 4 cm on admission
- Previous C/S for malpresentation/non-reassuring CTG
- > 18 months from previous C/S
- BMI < 30
- Birthweight < 4000g
- Caucasian
- < 40 years
- > 150 cm
- Female infant.

The likelihood of a successful VBAC also depends on the indication of the previous C/S. For example:

- C/S for breech/fetal distress: 76% success rate
- C/S for poor progress/ CPD: 50%-60% success rate
- C/S for failed instrumental delivery: 14% success rate.

Contraindications for a VBAC are:

- Two or more previous C/S
- Previous classical, inverted T or J incision
- Previous uterine rupture
- Myomectomy that breached uterine cavity
- Medical or obstetric reason for a repeat C/S.

2. Definitions

NBAC: Next Birth after Caesarean Section

VBAC: Vaginal Birth After Caesarean Section

C/S: Caesarean Section

TOL: Trial of Labour.

3. Responsibilities

Each maternity team should have at least 2 medical and 2 midwifery VBAC champions, who are responsible for the antenatal care of these women. This is to ensure consistent and accurate information regarding risks and benefits is given to the women when discussing her options for her next birth.

Sandringham Campus

Women who request or are suitable for a trail of labour are to be identified as soon as possible, preferably at their booking appointment.

The woman should be referred to the 'Next Birth After Caesarean' education session by emailing an appointment request to the organizing clinical specialist.

A 'previous CS' sticker is to be attached to the woman's medical record.

Pregnancy care appointments are to be with a consultant at 22, 28 and 36 weeks gestation.

The VBAC champion for women booked at Sandringham is the visiting Yellow Team Consultant.

Once the woman's intention to have a trail of labour is confirmed, advise her that there are two pathways that may occur depending on her clinical circumstances:

1) A caesarean is to be booked for Sandringham as close to 40 weeks as possible. If she labours spontaneously prior to 40 weeks, the TOLAC will occur at Sandringham
2) Care may be transferred to Parkville at 36 weeks in the following circumstances:
    a. Women who wish to extend their pregnancy beyond 41 weeks
    b. Induction of labour
    c. Complex medical/obstetric history

The option of an elective caesarean booking at 41 weeks at Sandringham must also be discussed as a contingency plan should the woman decline to have her labour induced or if induction is not deemed appropriate. The backup elective caesarean is to be booked at Sandringham (not on a Monday list).

The woman's medical record is transferred to Parkville and returned to Sandringham if the elective caesaraean proceeds. It is the responsibility of perioperative services at Sandringham to request the record from Parkville.

Referrals for transfer of care to Parkville should be made to the medical and midwifery team leaders of Yellow team, the Director of Obstetrics & Gynaecology at Sandringham, the Yellow team consultant VBAC champion who attends Sandringham, the Midwifery Director of Maternity, the antenatal clinic manager at Parkville and the Parkville Access Manager. See appendix for specific staff (correct as of January 2017).

4. Guideline

4.1. Antenatal management

Booking visit

It is essential to obtain the medical notes, including the operation report of the previous C/S, to establish indication, type of uterine incision and any peri-operative complications. After this the woman's suitability for TOL should be assessed as discussed.

The following information must be discussed with the women:

Maternal risks and benefits of TOL

Risks: 05% of scar rupture, 24-28% chance of emergency C/S, 10-15% chance of instrumental delivery and/or perineal trauma, 1.7% risk of blood transfusion, 2.9% risk of endometritis.

Benefits of TOL: 72-76% chance of successful VBAC, shorter hospital stay, increased likelihood that future pregnancies may be delivered vaginally, more likely to have immediate skin-to-skin contact at birth which has been shown to increase the rate of those still breastfeeding at 3 months.

Maternal risks and benefits of elective C/S

Risks: 0.1-0.2% serious surgical complications, increased risk of placenta previa/accreta, longer hospital stay will require repeat C/S.

Benefits: Plan to known delivery date, lower risk of blood transfusion (1%) and endometritis (1.8%), zero risk of uterine rupture, no risk of vaginal tears, can be surgically sterilized at the same time.

Perinatal risks and benefits of TOL

Risks: 0.1% risk of antepartum stillbirth beyond 39 weeks (10 per 10 000), 0.04% risk of delivery-related perinatal death, 0.08% risk of HIE during labour.

Benefits: 1% risk of transient respiratory morbidity.

Perinatal risks and benefits of emergency C/S

Risks: 1-3% transient respiratory morbidity (6% if delivered at 38 weeks), need for antenatal corticosteroids if elective C/S before 39 weeks.

Benefits: Avoid prospective risk of antepartum stillbirth, avoid risk of delivery-related perinatal death or HIE.

Risks of emergency C/S after failed TOL

Increased risks of uterine rupture (2.3 vs 0.11%), uterine dehiscence (2.1 vs 0.15%), hysterectomy (0.5 vs 0.15%), transfusion (3.2 vs 1.2%), endometritis (7.7 vs 1.2%).

Future fertility

One previous C/S has a four-fold increased risk for placenta previa.

The risk for placenta accreta increases with every subsequent C/S: 0.24, 0.31, 0.57, 2.13, 6.74%.

The risk of hysterectomy also increases with every subsequent C/S: 0.65, 0.42, 0.90, 2.41, 3.49, 8.99%.

At the booking visit written information on all the above, should be available to all women.

26 weeks

The woman is reviewed by an obstetrician or midwife VBAC champion and all options reviewed and questions answered.

This is documented on the Women's Antenatal NBAC Assessment form.

32 weeks

If the placenta was low-lying at the time of the 20 weeks ultrasound it should be repeated at 32 weeks to exclude placenta previa.

36 weeks

A discussion should take place with women booked for elective C/S, regarding mode of birth, should they labour before their C/S date. A plan should then be documented in the notes. Consideration should be given to corticosteroids if C/S is planned for before 39 weeks.

41 weeks

A discussion should be had on expectant management. Membrane sweep can be offered and possible induction discussed.

Induction and augmentation

There is a 2-3 fold increased risk of uterine rupture with induction or augmentation of labour. The risk of C/S is increased 1-5 fold with these procedures. Induction or augmentation of labour should only be considered with consultant involvement and a clear understanding by the woman about the increased risks.

5. Evaluation, monitoring and reporting of compliance to this guideline

Compliance to this guideline will be monitored through the monthly TeamCare data report which identifies the rate of successful VBAC.

6. References

1. The Consultative Council on Obstetric and Paediatric Mortality and Morbidity, 2008.
2. Society of Obstetricians and Gynaecologists of Canada Clinical Practice Guidelines: Guidelines for Vaginal birth After Previous Caesarean Birth, 2005.
3. National Institutes of Health Consensus Development Conference Statement: Vaginal Birth After Cesarean: New Insights, 2010
4. RANZCOG: Planned Vaginal Birth after Caesarean Section, 2010
5. Dekker GA, Chan A, Luke CG, Priest K, Riley M et al. Risk of uterine rupture in Australian women attempting vaginal birth after one prior caesarean section: a retrospective population-based cohort study. BJOG, 2010.

7. Legislation related to this guideline

Not applicable.

8. Appendices

Appendix 1: Next Birth After Caesarean: Decision Aid

Appendix 2: Refer to the Women's procedure: Trial of Labour (TOL) – Intrapartum Management.

Appendix: Parkville transfer referrals from Sandringham- clinical staff to be advised

Medical Team Leader- Prof Shaun Brenneke

Midwifery Team Leader- Moi Chin Lim

Director of Obstetrics & Gynaecology at Sandringham- Dr Penny Sheehan

Yellow team consultant VBAC champion who attends Sandringham- Dr Elske Posma

Midwifery Director of Maternity- Jenny Ryan

Pregnancy Clinic Manager at Parkville- Trish Ryan

Parkville Access Manager- Jo O'Connor

Next Birth After Caesarean education contact: Relle McMillin, relle.mcmillin@thewomens.org.au

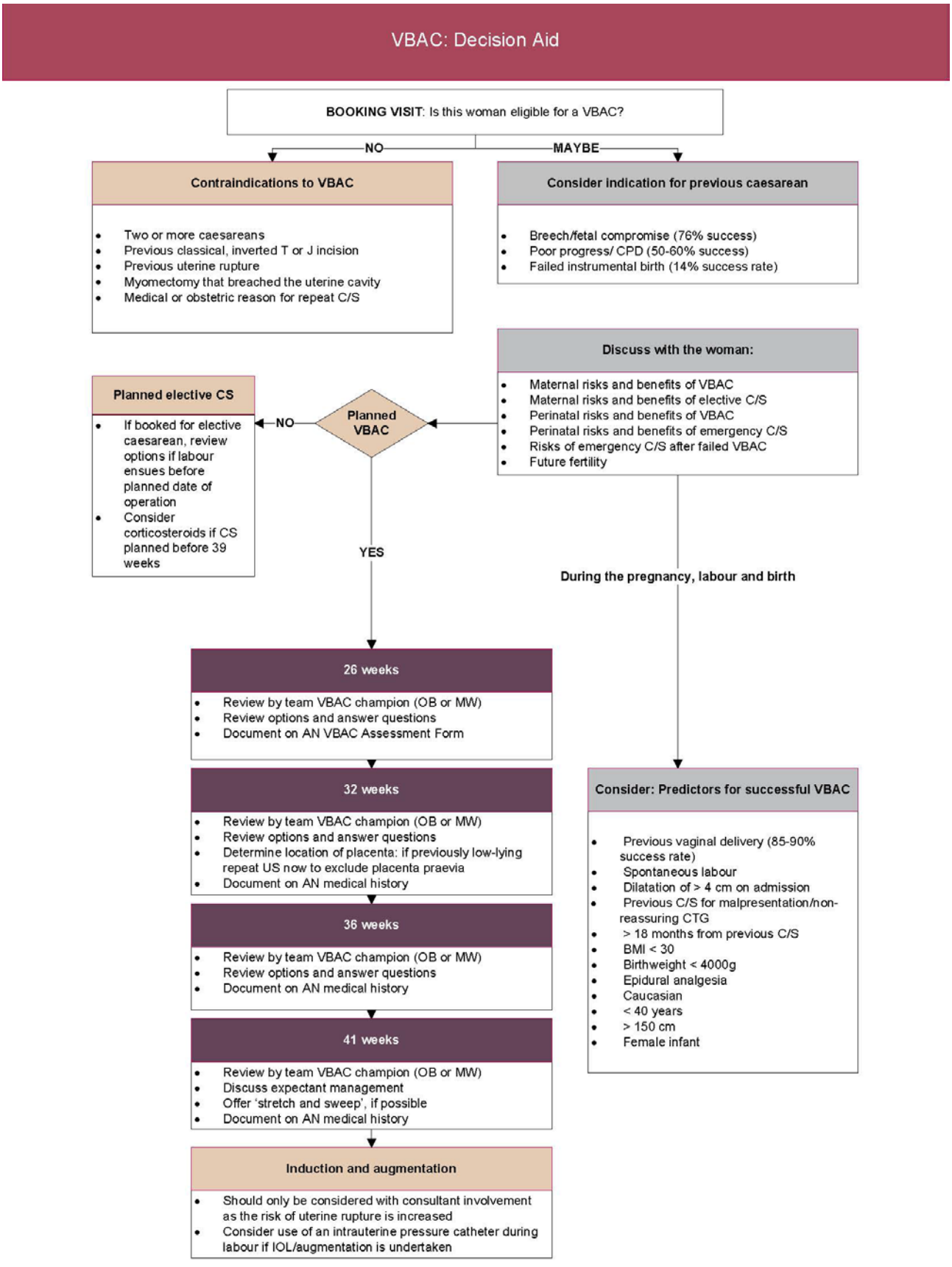
required, to take professional, expert advice from a legally qualified and appropriately experienced medical practitioner.

NOTE: Care should be taken when printing any clinical guideline from this site. Updates to these guidelines will take place as necessary. It is therefore advised that regular visits to this site will be needed to access the most current version of these guidelines.

Appendix 1

Next Birth After Caesarean (NBAC) - Decision Aid

the women's
the royal women's hospital



Appendix 1

Next Birth After Caesarean (NBAC) - Decision Aid

the women's
the royal women's hospital

VBAC: Decision Aid

Use this sheet to assist with decision making, ensure consistent and accurate information is imparted and documentation of same.
A copy of this form should be printed out and given to the woman at time of discussion.
The completed document should be filed in the woman's medical record.

Contraindications to VBAC		Date and Initials
• Two or more caesareans • Previous classical, inverted T or J incision • Previous uterine rupture • Myomectomy that breached the uterine cavity • Medical or obstetric reason for repeat C/S	Considered and excluded	
Consider indication for previous caesarean		
• Breech/fetal compromise (76% success) • Poor progress/ CPD (50-60% success) • Failed instrumental birth (14% success rate)	Considered and discussed	
Discuss with the woman:		
Maternal risks and benefits of VBAC • Risks: 05% of scar rupture, 24-28% chance of emergency C/S, 10-15% chance of instrumental delivery and/or perineal trauma, 1.7% risk of blood transfusion, 2.9% risk of endometritis. • Benefits of VBAC: 72-76% chance of successful VBAC, shorter hospital stay, increased likelihood that future pregnancies may be delivered vaginally, more likely to have immediate skin-to-skin contact at birth which has been shown to increase the rate of those still breastfeeding at 3 months.	Considered and discussed	
Maternal risks and benefits of elective C/S • Risks: 0.1-0.2% serious surgical complications, increased risk of placenta previa/accreta, longer hospital stay will require repeat C/S. • Benefits: Plan to known delivery date, lower risk of blood transfusion (1%) and endometritis (1.8%), zero risk of uterine rupture, no risk of vaginal tears, can be surgically sterilized at the same time.	Considered and discussed	
Perinatal risks and benefits of VBAC • Risks: 0.1% risk of antepartum stillbirth beyond 39 weeks (10 per 10 000), 0.04% risk of delivery-related perinatal death, 0.08% risk of HIE during labour. • Benefits: 1% risk of transient respiratory morbidity	Considered and discussed	
Perinatal risks and benefits of emergency C/S • Risks: 1-3% transient respiratory morbidity (6% if delivered at 38 weeks), need for antenatal corticosteroids if elective C/S before 39 weeks. • Benefits: Avoid prospective risk of antepartum stillbirth, avoid risk of delivery-related perinatal death or HIE.	Considered and discussed	
Risks of emergency C/S after failed VBAC • Increased risks of uterine rupture (2.3 vs 0.11%), uterine dehiscence (2.1 vs 0.15%), hysterectomy (0.5 vs 0.15%), transfusion (3.2 vs 1.2%), endometritis (7.7 vs 1.2%).	Considered and discussed	
Future fertility • One previous C/S has a four-fold increased risk for placenta previa. • The risk for placenta accreta increases with every subsequent C/S: 0.24, 0.31, 0.57, 2.13, 6.74%. • The risk of hysterectomy also increases with every subsequent C/S: 0.65, 0.42, 0.90, 2.41, 3.49, 8.99%.	Considered and discussed	
Induction and augmentation	Considered and discussed	
• Should only be considered with consultant involvement as the risk of uterine rupture is increased • Consider use of an intrauterine pressure catheter during labour if IOL/augmentation is undertaken	**Form completed by: name and designation**	