1. Purpose

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

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%.

VBAC 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.

The success rate of VBAC ranges from 55-85% for those attempting normal birth. Predictors for successful VBAC 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
- Epidural analgesia
- 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

VBAC: Vaginal Birth After Caesarean Section
C/S: Caesarean Section

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.

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 VBAC should be assessed as discussed.

The following information must be discussed with the women:

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.

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 elective C/S

*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 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%).

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 VBAC 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 or procedure will be monitored through the monthly TeamCare data report which identifies the rate of successful VBAC.

6. References
4. RANZCOG: Planned Vaginal Birth after Caesarean Section, 2010

7. Legislation related to this guideline
Not applicable.

8. Appendices
Not Applicable.

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