

1 ANTEPARTUM CARE

1.1 ANTEPARTUM CLINIC VISITS

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1.1.10 Care of a woman with a previous caesarean section – Antepartum preparation
Section B
Clinical Guidelines
King Edward Memorial Hospital
Perth Western Australia

1.1.10 CARE OF A WOMAN WITH A PREVIOUS CAESAREAN SECTION – ANTEPARTUM PREPARATION

AIM

To enable women, who have had a previous caesarean section, to make an informed choice for the method of delivery in a subsequent pregnancy. Accurate information on the benefits and risks of Vaginal Birth after Caesarean Section (VBAC) and repeat elective caesarean section should be provided to women who have had a previous caesarean section.

OPTIONS

1. **Repeat Elective Caesarean Section** – women who have had a previous caesarean section will be offered an elective caesarean section in a subsequent pregnancy. There will be women for whom an elective caesarean section may be the primary choice of management due to medical reasons and/or maternal choice.

2. **Vaginal Birth after Caesarean Section (VBAC)** – women who have had a previous caesarean section will be offered the option of a vaginal birth in a subsequent pregnancy. There will be women for whom a VBAC may be the primary choice of management, after careful review by the Obstetric team of past medical history.

ABSOLUTE CONTRAINDICATIONS TO VBAC^{1, 2, 5, 13}

- Previous classical Caesarean section;
- Previous inverted 'T' uterine incision;
- Previous uterine surgery i.e. myomectomy;
- Previous uterine rupture;
- Previous 'J' incision;
- Previous Cephalo-pelvic disproportion (CPD) with anticipation of CPD in the current pregnancy;

RELATIVE CONTRAINDICATIONS TO VBAC

- Two previous lower section caesarean sections;
- Breech presentation and other malpresentation;
- Previous significant sepsis post caesarean section;
- Multiple pregnancy;
- Known fetal macrosomia or fetal intrauterine growth restriction;
- Body mass index (BMI) greater than 40



BENEFIT AND RISK COUNSELLING

As with any birth, there are possible complications that women should be aware of, but the likelihood of severe injury or death in a VBAC, repeat caesarean section or unplanned caesarean is low. An attempted VBAC is associated with increased perinatal morbidity and mortality compared to elective Caesarean section, but the absolute risk is low. Serious maternal morbidity is associated with both attempted VBAC and elective Caesarean section, but absolute risk is low.

The evidence to date suggests that for most women who have undergone prior lower uterine segment caesarean section, and have no contraindications to VBAC, should be offered a VBAC, after providing appropriate counselling^{1,2}.

Counselling should take into account:

- Woman's previous obstetric experience and expectations
- A general discussion of overall benefits and risks of caesarean section including
 - risk of uterine rupture
 - risk of perinatal morbidity and mortality^{2,3}
 - separation of the mother and baby.

Women who have had a previous caesarean section should be referred to an Obstetric consultant during the antenatal period to discuss labour and birth management (at approximately 24 weeks gestation).

There are no randomised-controlled trials to date that compare planned repeat caesarean section with planned vaginal birth. Data is derived principally from heterogeneous retrospective analysis, or prospective observational studies⁴ (Level III-1).

BENEFITS TO WOMEN

Women considering VBAC should be counselled that the literature suggests that overall there is a high chance of success:

- For women with a single previous caesarean section, a success rate of 72-76% (Level IIa & IIb)²

However, the success rate varies according to the indication for the previous caesarean birth and other factors such as previous successful VBAC, high BMI, large baby and malposition in this pregnancy and these factors should be considered for each woman. At King Edward Memorial Hospital, the rate was 55% in 2006 and this is a more appropriate rate to quote when a woman is considering VBAC in this hospital.

- Less morbidity is encountered in women with successful VBAC compared to those with repeat elective caesarean birth. Women with successful VBAC have fewer blood transfusions; fewer postpartum infections and shorter hospital stays postpartum than women having a repeat elective caesarean section⁵. However, there is higher morbidity in women with unsuccessful VBAC compared to those with repeat elective caesarean birth. Overall, there is no real short term benefit in maternal morbidity from choosing a VBAC compared with elective caesarean section³⁻⁶.

RISKS TO WOMEN²

Women attempting a VBAC have a:

- risk of an emergency caesarean section of around 45-50% at KEMH.
 - if a woman undergoes non elective caesarean section, in this instance, then she has an increased risk of haemorrhage, blood transfusions and infection than those women who opt for an elective C/S although absolute risk of these complications is low.



- increased risk of being unsuccessful if the following risk factors are present: induced labour, no previous vaginal birth, body mass index greater than 30, and previous caesarean section for dystocia. If all these risk factors are present the literature suggests a lower success rate of 40%²
- risk of symptomatic scar rupture with VBAC is between 2-7 per 1000³⁻⁶. (Level 111)
- there is no difference with hysterectomy rates between women attempting VBAC and women undergoing elective caesarean section - 2 per 1000.⁷
- there is no increase in maternal mortality with attempted VBAC over elective caesarean section³⁻⁶.
- women considering the mode of birth for a pregnancy subsequent to a caesarean section should be counselled that the decision to have an elective caesarean section might increase the risk of serious complications in future pregnancies [Placenta praevia (RR 4.5), placenta accreta (complicating 10-25% of placenta praevias) and hysterectomy]^{10,11}

BENEFIT TO THE NEONATE

Women considering VBAC should be informed that an attempt at vaginal birth reduces the risk of the neonate developing respiratory problems which may require admission to the neonatal unit^{2, 4, 5}.

However, the risk of transient tachypnoea of the newborn (TTN) is small (7 per 1,000 at 37 weeks, 4 per 1,000 at 38 weeks and less than 2 per 1,000 at 39 weeks) and in the only two comparative studies reporting on incidence of TTN there was no difference in this outcome between VBAC and elective caesarean section³.

RISKS TO THE NEONATE²

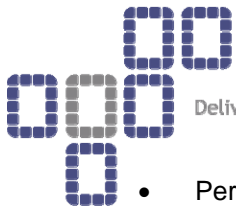
An attempted VBAC is associated with increased perinatal morbidity and mortality compared to elective Caesarean section, but the absolute risks are low (about 1 in 1,000 for each).

Hypoxic Ischaemic encephalopathy (HIE) is significantly greater in VBAC (7.8 per 1,000) compared to zero risk with elective Caesarean section.

Women considering planned VBAC should be informed that the additional risk of birth related perinatal death is difficult to quantify and could be as low as around 2-3 per 10,000⁷ or as high as 1 in 377¹². The best estimate of the additional risk is 1 in 860 VBAC attempts¹³ and could be approximated to 1 in 1,000 which is similar to the risk for women having their first birth.

ANTEPARTUM MANAGEMENT

- The woman's previous birth experience and expectations should be discussed at booking. Written information about VBAC should be provided – RANZCOG VBAC information sheet and KEMH VBAC information pamphlet are both available in the antenatal clinic.
- Medical records of the first labour should be obtained from the hospital in which the birth took place. This needs to include the partogram (if labour occurred) and the operative notes¹.
- Discussion regarding benefits and risks of attempting VBAC to take place between a midwife/doctor and the woman.
- A signed consent form for VBAC to be obtained by a doctor, ideally at 36 weeks, with documented Consultant involvement on the MR004 (see below).
- Highlight the plan for VBAC with the VBAC Management Plan for Women in Labour green sticker in the Obstetric Instruction sheet (MR004)¹. Any deviation from standard care that the woman chooses is documented on the Non Standard Management Form sticker, which should be placed in the patient's notes and signed by the patient and the consultant.



- Perform an ultrasound to check for placental localisation and any abnormal placentation if not previously documented.

INDUCTION

Women who have had a previous caesarean section may be offered induction of labour but need to be informed that the success rate for a VBAC is decreased. There is an increased risk of uterine rupture with oxytocin use (from 1-5:1000 to 8:1000)¹⁴.

Prostaglandins are not licensed in Australia for use in women with a uterine scar. They are associated with a risk of uterine rupture of 24:1000⁵.

The decision for induction of a woman with a previous caesarean scar should consider any other risk factors present, e.g. grand multiparity, BMI above 40 and be discussed with the Obstetric consultant.

See [Clinical Guidelines, Section B, 5.12 Care of a woman attempting a vaginal birth after caesarean intrapartum care](#).

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