Perinatal Manual of Southwestern Ontario
A collaboration between the Regional Perinatal Outreach Program of Southwestern Ontario & the Southwestern Ontario Perinatal Partnership (SWOPP)

Chapter 41

VAGINAL BIRTH AFTER CAESAREAN SECTION (VBAC)

"The majority of women who have experienced a low segment transverse Caesarean section are candidates for a trial of labour."

SOGC ALARM course 2006 syllabus.

SUCCESS RATE

The success rate for those undergoing trial of labour following one previous Caesarean section is in the 60 to 80% range.
Discussion needs to take place with the woman regarding factors which increase the risk of uterine rupture:

- Single (vs double) layer closure of the uterine scar (noted in the OR note)
- Short interval (<24 months) from previous caesarean section
- More than one previous caesarean section
- Obstructed labour

PATIENT SELECTION

- Document the nature of the previous scar
- Consider the previous obstetrician's opinion
- ***Recommend*** TOL (trial of labour)
  - One transverse low segment scar
- ***Offer*** TOL
  - One previous Caesarean section – documented low segment
  - Twins

Contraindications to VBAC Include

- Contraindications to labour
- Previous classical Caesarean section
- Inability to perform immediate Caesarean birth
- Opinion of previous surgeon
- Inverted T or unknown scar

Disclaimer
The Regional Perinatal Outreach Program of Southwestern Ontario has used practical experience and relevant legislation to develop this manual chapter. We recommend that this chapter be used as a reference document at other facilities. We accept no responsibility for interpretation of the information or results of decisions made based on the information in the chapter(s)

- Other previous uterine surgeries (full-thickness incision at myomectomy)
- Woman declines a trial of labour and requests to have an elective repeat caesarean section

CONDUCT OF LABOUR

Conduct of labour is similar to the conduct of a normal labour. While antepartum consultation with an obstetrician is not mandatory; local factors may influence the advisability of antenatal and intrapartum specialist consultation and involvement.

Secure an IV access (Saline lock may be used)

- Cervix may be ripened *
- Labour may be induced **
  - Foley catheter, oxytocin
- Labour may be augmented
- Prostaglandins are **not** recommended for ripening of the cervix, or for induction of labour
- Epidurals, or other analgesia, may be used
- Continuous Electronic Fetal Monitoring (EFM) is recommended

* Use of mechanical device eg Foley catheter, rather than prostaglandins, is safer for cervical ripening.

** If an induction with oxytocin is done in the presence of a low-segment Caesarean section scar, the woman and her physician must understand the limitation of knowledge in this area. Immediate availability of physicians and resources to respond to an emergency must be provided, as case reports of uterine ruptures use have been reported.

HOSPITAL REQUIREMENTS

Facilities providing VBAC should have a policy in place to manage such parturients so that all resources can be mobilized promptly. The availability and time required for obstetric, anaesthesia, and pediatric services to attend such an emergency should be fully discussed with the woman. Women who live in areas where local hospitals cannot offer immediate caesarean Section should be offered the opportunity for transfer to a facility where this service is available.

Disclaimer
The Regional Perinatal Outreach Program of Southwestern Ontario has used practical experience and relevant legislation to develop this manual chapter. We recommend that this chapter be used as a reference document at other facilities. We accept no responsibility for interpretation of the information or results of decisions made based on the information in the chapter(s)

The members of the team who could be called urgently in the case of an intrapartum complication (anaesthesia, pediatric, and obstetric services) should be notified that the woman is in hospital and in labour and their availability confirmed.

Personnel should be able to recognize the signs and symptoms of uterine scar rupture.

SCAR RUPTURE

Disruption of a previous uterine incision may vary from a 'silent' dehiscence of a low segment transverse incision to a rapid and explosive intra-abdominal catastrophe. While the literature supports judicious oxytocin augmentation, the arrest of active labour in a woman undergoing VBAC must be carefully assessed before oxytocin is administered. Therefore, when VBAC is undertaken and especially when oxytocin is used with a previous Caesarean section, an informed consent must be obtained. Indications of scar rupture include:

- Non-reassuring fetal heart rate
- Ease of fetal palpation
- Cessation of contractions
- Hematuria
- Vaginal bleeding
- Elevation of presenting part
- Scar pain
  - Poor sensitivity and specificity
  - Seldom masked by epidural
- Presence of bowel or omentum in uterus or protruding from the cervix immediately postpartum.

CONSIDERATIONS

1. When a woman with one previous Caesarean section presents for prenatal care, counselling should include:
   - attempt VBAC, provided there are no contraindications in the index pregnancy
   - offer VBAC if more than one previous Caesarean section, provided no contraindications exist
   - plan birth in hospital

Disclaimer
The Regional Perinatal Outreach Program of Southwestern Ontario has used practical experience and relevant legislation to develop this manual chapter. We recommend that this chapter be used as a reference document at other facilities. We accept no responsibility for interpretation of the information or results of decisions made based on the information in the chapter(s)

- inform woman of local protocol for VBAC

2. When a woman with a previous Caesarean section presents in active labour, consider:
    - local hospital requirements
    - need for I.V. access
    - method of fetal health surveillance in labour
    - personnel needs eg. Surgical, anaesthetic, neonatal resuscitation, obstetrical consultation
    - risks of augmentation of labour if labour stops or is non-progressive (rupture may result)
    - when to transfer

SUGGESTED READING

1. Society of Obstetricians and Gynecologists of Canada (SOGC), **Advances in Labour and Risk Management (ALARM) Course Syllabus**, 14th ed., Ottawa, 2007.

2. ***SOGC Clinical Practice Guidelines***, JOGC, No. 155, February 2005. [internet http://sogc.medical.org/guidelines]

Disclaimer
The Regional Perinatal Outreach Program of Southwestern Ontario has used practical experience and relevant legislation to develop this manual chapter. We recommend that this chapter be used as a reference document at other facilities. We accept no responsibility for interpretation of the information or results of decisions made based on the information in the chapter(s)