GUIDELINE FOR VAGINAL BIRTH AT HOME AFTER ONE PREVIOUS LOW SEGMENT CESAREAN SECTION

The College of Midwives of British Columbia supports registered midwives in providing primary care for women planning a vaginal birth after one previous low-segment cesarean section (VBAC). 1

Current evidence supports women in choosing vaginal birth after cesarean section, despite a somewhat increased risk of uterine rupture, a complication with serious consequences for mother and newborn.

Previous cesarean section is a factor in somewhat less than half of all reported cases of uterine rupture. Varying rates of uterine dehiscence 2 and rupture 3 in the presence of a previous cesarean section scar are reported in the literature. Uterine ruptures, reports of which often include asymptomatic dehiscences that are of no clinical significance, occur in 0.5 - 3.3 % (1 in 500 to 1 in 30) of all VBAC trials. This rate is similar to the rate of ruptures reported for elective repeat cesarean sections (0.5 - 2%). The rate of catastrophic rupture, where the life of mother and infant are in serious jeopardy, is more difficult to determine as this event is often included with the more common and much less worrisome dehiscence. The reported rate of true catastrophic uterine rupture in the VBAC literature ranges from 0.09 to 0.8% (1 in 900 to 1 in 125 births). The midwife should inform her client wishing to have a VBAC in either the home or the hospital, of the risk of uterine rupture. A copy of this guideline or an alternate written client handout should be offered.

Enkin et al (2000) report in *A Guide to Effective Care in Pregnancy and Childbirth* "To put these rates (of rupture) into perspective, the probability of requiring an emergency cesarean section for other acute conditions (fetal distress, cord prolapse, or antepartum hemorrhage) in any woman giving birth is approximately 2.7 percent - or up to 30 times as high as the risk of uterine rupture with a planned vaginal birth after cesarean." The extremely low level of risk does not minimize the importance of this complication to women who suffer it, but comparisons may help put the risk picture in perspective.

Considerations for VBAC at Home

Many women with a history of previous cesarean section with no contraindications to VBAC will be comfortable having a subsequent vaginal birth in hospital with midwifery care. However, some VBAC women will come to midwives requesting home birth. Clients with the following conditions may be candidates for vaginal birth in hospital, but should be advised that they are not suitable candidates for a home birth:

* History of cesarean section at or before 26 weeks
* History of impaired uterine scar healing
* Inter-pregnancy interval of less than 6 months

* Ballotable head in active labour
* Prolonged active phase of labour

Additional Risk

Despite the relatively small risk, true uterine rupture is a major obstetrical complication with potentially grave consequences for both mother and newborn. Being able to access a cesarean section quickly is very important. Distance to hospital, road and weather conditions, as well as the services available at the nearest hospital are all factors that need to be considered by any woman thinking about having an out-of-hospital birth. When planning a VBAC at home, the time it will take to travel to a hospital with cesarean section capabilities must be considered in the light of the small window of time in which one must initiate a cesarean when there is a uterine rupture. A BC hospital providing maternity care may not have the ability to perform an emergency cesarean section.

Midwives should discuss this additional risk with their clients and advise their clients of their local hospital's ability to respond to emergency situations.

Labour Management

Labour management for VBAC at home should include:

a) regular assessment of labour progress and maternal health, with particular awareness of the signs of impending uterine rupture;
b) regular assessment of fetal health according to the College's *Guidelines for Fetal Health Surveillance in Labour*. More frequent monitoring may be considered, based on the midwife's assessment of the length, strength and frequency of contractions;
c) reasonable progress in effacement, dilation and descent every 2-4 hours in active labour;
d) initiation of transport arrangements if
    * there are concerns about maternal or fetal well-being,
    * the first stage of labour is prolonged, or
    * there is minimal progress in the first hour of active second stage pushing or within two hours of full dilation.
e) close observation of blood loss in the hour immediately following delivery of the placenta.

Client teaching should include:

a) antenatal opportunities to review and discuss concerns related to previous cesarean section;
b) discussion of the possibility of repeat cesarean section;
c) discussion of the signs and symptoms of uterine rupture.

Documentation of the discussion between the midwife and client of the risks and benefits of VBAC at home should be made on the antenatal record.

Signs that may occur with Complete or Partial Rupture

Midwives must be aware of the signs and symptoms that may indicate uterine rupture in labour. (Rupture of the uterus prior to labour is a rare

event and usually involves a classical scar rather than a low-segment scar.)

* Sudden fetal distress (tachycardia or decelerations)
* Unusual abdominal/uterine pain
* Cessation of contractions or incoordinate uterine activity
* Unexplained vaginal bleeding
* A sudden onset of maternal tachycardia and hypotension
* Excessive fetal movement
* Fetal parts may be easily palpated through the abdominal wall
* Presenting part may be higher than previously palpated

Signs that may occur with Impending Uterine Rupture

* Inadequate progress (of cervical dilation or descent) despite good contractions
* Incoordinate uterine activity
* Restlessness and anxiety
* Lower abdominal pain or suprapubic tenderness between contractions

Signs or symptoms of uterine rupture in a VBAC client are indications for immediate transport to hospital and physician consultation. Transfer of care will be required unless rupture is ruled out on consultation. If uterine rupture is suspected, the midwife initiating transport should ask the hospital to prepare for an emergency cesarean section.

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1 The College's *Indications for Discussion, Consultation and Transfer of Care* ask the midwife to discuss a VBAC client's plan of care with another midwifery colleague.

2 Scar dehiscence is the breakdown and reopening of the old cesarean scar. Most dehiscences involve minor tearing around the scar, are asymptomatic and heal well. Many go undetected.

3 A true uterine rupture in a VBAC is a scar dehiscence that is large enough to need surgical repair. It is almost always symptomatic, with the most common first indicator being fetal distress. Maternal shock from blood loss is also possible.