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## **GUIDELINE FOR VAGINAL BIRTH AFTER ONE PREVIOUS LOW SEGMENT CAESAREAN SECTION**

The College of Midwives of Manitoba supports registered midwives in providing primary health care for women planning a vaginal birth after a previous Caesarean section (VBAC). The Standard for Discussion, Consultation and Transfer of Care will be upheld with respect to screening and selection of women.

Despite the somewhat increased risk of uterine rupture, current evidence supports the choice of women for choosing VBAC. The literature reports rate of uterine rupture ranging from 0.09 to 1%. Previous caesarean section is a contributing factor in somewhat less than half of the documented cases of uterine rupture. An attempted vaginal birth is the preferred method of management for most women.

Women who are choosing to have a VBAC should be informed of the risk of uterine rupture, regardless of choice of birthplace. The midwife should be aware of increased risk of uterine rupture during the third trimester or prior to onset of labour.

### **Considerations:**

#### **1. Screening Criteria: General**

The following conditions are generally accepted as contraindications to VBAC:

- Previous classical Caesarean section or T-shaped incision;
- Previous deep myomectomy, hysterotomy, or fundal reconstructive surgery;
- Any complication of current pregnancy which requires urgent induction in the presence of an unfavorable cervix;
- Absolute cephalo-pelvic disproportion (CPD), eg. Pelvic injury;
- Any contraindication to vaginal birth, eg. Transverse lie, placenta previa;
- Previous uterine rupture;
- Lack of access to emergency caesarean section birth if necessary;

NOTE: The midwife should attempt to retrieve operative reports of the previous Caesarean section, and previous obstetrical history as available.

#### **2. Screening Criteria: Out of Hospital Birth**

Women with the following conditions who are planning a VBAC may be candidates for hospital birth, but should be advised that an out of hospital setting is not suitable if the following are present:

- History of Caesarean section at or before 26 weeks;
- History of impaired scar healing;
- Inter-pregnancy interval of less than 18 months;
- Prolonged active phase of labour with lack of progress;

**3. Additional Risk: Out of Hospital**

Additional risk may be presented with certain circumstantial factors;

- Single layer uterine closure;
- The distance to hospital;
- Road and weather conditions;
- Services available at the hospital (i.e. whether or not the hospital has emergency Caesarean section capabilities).

**4. Client teaching:**

In keeping with the College of Midwives Standard on Informed Choice, the midwife should document that the following risks and benefits have been discussed with the client:

- Concerns related to previous Caesarean section;
- Possibility of repeat Caesarean section;
- Signs and symptoms of uterine rupture;
- Reasons to transport to hospital/consult during labour.

**5. Labour Management:**

Labour Management for planned VBAC out of hospital should include:

- Regular assessment of fetal health. More frequent monitoring may be considered, based on the midwife's assessment of the length, strength and frequency of contractions;
- Regular assessment of labour progress in terms of effacement, dilation and descent in active labour;
- Regular assessment of maternal health, with particular awareness of psychological effects on labour progress;
- Regular assessment of maternal health, with particular awareness of potential impending uterine rupture;
- Initiation of transport arrangements/consult if there is a prolonged first stage of labour, minimal progress during second stage pushing or concerns about maternal or fetal well-being;
- Refer to the "Standard for Planned Out of Hospital Birth".

**6. Possible signs of impending uterine rupture:**

- Inadequate progress (cervical dilation or descent) despite good contractions;
- In-coordinate uterine activity;
- Maternal restlessness and anxiety;
- Lower abdominal pain or suprapubic tenderness between contractions;
- Hematuria;
- Bandl's ring.

**7. Possible signs of complete or partial uterine rupture:**

Signs or symptoms of uterine rupture in a VBAC client are indications for immediate transport to hospital/physician consultation. Transfer of care will be required if rupture is suspected. The hospital should be prepared for emergency Caesarean section.

Although this is a rare event, midwives must be aware of the following signs and symptoms that may indicate uterine rupture in labour:

- Undue maternal distress in relation to progress ~~to~~ of labour;
- Sudden fetal distress (tachycardia or decelerations);
- Unusual abdominal or uterine pain;
- Persistent pain between contractions;
- Cessation of contractions or in-coordinate uterine activity;
- Unexplained vaginal bleeding;
- A sudden onset of maternal tachycardia and hypotension; \*
- Excessive fetal movement;
- Fetal parts easily palpated through the abdominal wall;
- Presenting part may be higher than previously palpated;
- Signs and symptoms of shock;
- Onset of sudden sharp lower abdominal pain.

**\*NOTE:** "Incomplete rupture may also be manifest as a cause of postpartum hemorrhage following vaginal birth. Whenever shock during the third stage is more severe than the type of delivery or blood loss warrants or the mother fails to respond to treatment given, the possibility of incomplete rupture should be considered". (Myles, 1999)

### **REFERENCES:**

Allardice, J. G., "Has the uterus ruptured during V-BAC?" *Journal SOGC* (1992), 65-8.

American College of Obstetricians and Gynecologists. "Vaginal birth after previous caesarean delivery." *ACOG Practice Bulletin* No. 2, October 1998.

Appleton, B., Targett, C., Rasmussen, M., Readman, E., Sale, F., & Permezel, M., "Vaginal birth after caesarean section: an Australian multicentre study. VBAC Study Group," 40(1) *Aust N Obstet Gynecol* (Feb. 2000), 87-91.

*BCRP Guideline for Perinatal Care*, "Vaginal Birth After Caesarean Section (VBAC)" May 1994.

Bennet, V.R. & Brown, L.K., & Myles, M.F., Eds., *Myles Textbook For Midwives*, 1996, 1999.

Cowan, R.K., Kinch, R.A., Ellis, B. & Anderson, R., "Trial and labor following caesarean delivery," 83 *Obstet Gynecol* (1994), 933-6.

Cunningham F., MacDonald P., Leveno K., Gant N.F., and Gilstrap L.. Eds, *Williams Obstetrics*, 19<sup>th</sup> ed., (1993) Prentice-Hall International Inc., USA.

Enkin, Keirse, Renfrew and Neilson, *A Guide to Effective Care on Pregnancy and Childbirth*, 2<sup>nd</sup> ed., 1995.

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Flamm, B. L., Newman, L.A., Thomas, S. J., Fallon, D. & Yosida, M. M., "Vaginal birth after caesarean delivery: results of a 5-year multicentre collaborative study," 76 *Obstet Gynecol* (1990), 750-4.

Gabbe, S.G. et al. Eds. *Obstetrics: Normal and Problem Pregnancies*, 2<sup>nd</sup> ed., 1991, and 3<sup>rd</sup> ed., 1996.

Helewa, M. "Rupture of the pregnant uterus: the evidence from this decade on risk factors, predictability and prognosis," 21(9) *Journal SOGC* (1999), 864-73.

Marshak J. D., Cooperman B. S., Fried W. B. and Shi Q., "Prognostic indicators for successful vaginal birth after caesarean delivery," 94 4(2) *Obstet Gynecol* (2000), S38.

McMahon, M. J., Luther, E. R., Bowes, W. A. Jr., and Olshan, A. F., "Comparison of a trial of labor with an elective second caesarean section," 335 *N Eng J Med* (1996), 689-695.

Obara, H., Minakami, H., Koike, T., Takamizawa, S., Matsubara, S., & Sato, I., "Vaginal birth after caesarean delivery: results in 310 pregnancies," 24(2), *Obstet Gynecol* (1998), 129-134.

Sachs, B. P., Kobelin, C., Castro, M. A. & Frigoletto, F., "The risks of lowering the caesarean delivery rate," 340 (1) *N Eng J Med* (1999), 54-7.

Schipp T., Zelop C.M., Repke J.T., Cohen A., and Lieberman E., "Interdelivery interval and risk of symptomatic uterine rupture," 97(2) *Obstet Gynecol* (2001), 175-177.

Shimonovitz, S., Botosneano, A., and Hochner-Celnikier, D., "Successful first vaginal birth after caesarean section: a predictor of reduced risk for uterine rupture in subsequent deliveries," 2(7) *Isr Med Assoc J* (July 2000), 526-8.

Society of Obstetricians and Gynecologists of Canada (SOGC), *Clinical Practice Guidelines for Obstetrics*, No. 19, December 1995.

Society of Obstetricians and Gynecologists of Canada (SOGC). "Vaginal Birth After Previous Caesarean Birth," *SOGC Policy Statement* No. 68, December 1997.

Socol, M. L., and Peaceman, A.M., "Vaginal birth after caesarean: an appraisal of fetal risk," 93(5 Pt. 1) *Obstet Gynecol* (May 1999), 674-9.

Star, W.L., Shannon, M.T., Lommel, L.L., & Gutierrez, Y., *Ambulatory Obstetrics: Protocols for Nurse Practitioners/Nurse-Midwives*, 2<sup>nd</sup> ed., 1990 (Univ. of California Regents).

Stedman, C.M., Scudder, S.R., Joseph, G.F., "Vaginal birth after caesarean delivery: a group practice's approach to minimizing failed trial and labor," 5(4) *Prim. Care Update Ob Gyns* (July 1998), 187-88.

Varney, H. et al. *Varney's Midwifery*, 1997 (Jones & Bartlett Publisher, Inc.)