

TITLE

EXTERNAL CEPHALIC VERSIONSCOPE

Edmonton Zone, Women's Health Program Obstetrics

DOCUMENT

EDM-Ob-01

APPROVAL LEVEL

Department of Obstetrics and Gynaecology Edmonton Zone
Clinical Department Executive Committee

INITIAL APPROVAL DATE

March 1, 2004

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Edmonton Zone, Women's Health Program Executive
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INITIAL EFFECTIVE DATE

March 1, 2004

CATEGORY

Health Care and Services

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PARENT DOCUMENT TYPE & TITLE

Not applicable

NOTE: The first appearance of terms in bold in the body of this document (except titles) are defined terms – please refer to the Definitions section.

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OBJECTIVE(S)

- The rationale for **External Cephalic Version (ECV)** is to decrease the number of breech presentations at the time of delivery. Cephalic presentation, as compared with breech presentation, is associated with lower short term morbidity for the fetus although no significant difference in long-term outcome has been documented.

PRINCIPLES

A meta-analysis of five randomized controlled trials (RCTs) comparing ECV at term to no attempt at ECV showed a significant reduction in non-cephalic births (relative risk [RR] 0.38; 95% confidence interval [CI], 0.18–0.80) and C/S (RR 0.55; 95% CI 0.33–0.91). There was no significant effect on perinatal mortality (RR 0.51; 95% CI 0.05–5.54) or other measures of perinatal outcome. (Li, Z et al, Australian mothers and babies 2010) It is therefore recommended that all women with breech Presentation at or beyond 36 weeks' gestation, who are appropriate candidates, be offered an ECV.

APPLICABILITY

Compliance with this document is required by all Alberta Health Services employees, members of the medical and midwifery staffs, Students, Volunteers, and other persons acting on behalf of Alberta Health Services (including contracted service providers as necessary), working in Edmonton Zone Women's Health Program Obstetrics.

- Family practice physicians and midwives are required to obtain a consultation from an obstetrician.

TITLE	EFFECTIVE DATE	PAGE
External Cephalic Version	June 1, 2017	2 of 5

- Family practice physicians will follow the consultation requirements as outlined in:
 - Family Physicians' Guideline for Physician consultation and Transfer of Responsibility for Care – Edmonton Zone
 - Individual Privileging and Required skills for General practitioners with Obstetrical privileges – Edmonton Zone
- Midwives will follow the consultation requirements as outlined in:
 - Midwifery Guidelines for Physician Consultation and Transfer of Responsibility for Care – Edmonton Zone

ELEMENTS

1. Management

- 1.1 Obtain informed consent. Informed consent should be documented and should include a written signed consent. The woman should be informed that:
 - a) Successful ECV will reduce the chance of a C/S (Success varies widely from 30%–80%)
 - b) Sedation and tocolysis may be used
 - c) The procedure may be uncomfortable
 - d) There are risks and benefits of the procedure
- 1.2 The procedure must be performed in a facility with the ability to carry out immediate intervention including a C/S, if needed.
- 1.3 A **Non-stress-test (NST)**, or **Biophysical profile (BPP)**, should be carried out and must be normal before the procedure is started.
- 1.4 An ultrasound examination should be performed to confirm the fetal **Position**. Real-time ultrasound is also done intermittently during the procedure to check progress and monitor the fetal heart rate.
- 1.5 The abdomen may be lubricated with ultrasound gel or powder to make the procedure easier.
- 1.6 In the initial ECV attempt, the direction of rotation should be so that the baby 'follows its nose' (i.e., a forward roll) Proceed as follows:
 - a) Dislodge the buttocks from the pelvis pushing upwards and then laterally.
 - b) Grasp the head and direct it downwards.

TITLE	EFFECTIVE DATE	PAGE
External Cephalic Version	June 1, 2017	3 of 5

- c) Slowly rotate the baby by pushing upwards and to the side of the fetal back with the hand holding the buttocks, at the same time guiding the head downwards and to the opposite side.
 - d) When the head reaches a lower level than the buttocks, maneuver the head over the pelvic inlet.
 - e) If the forward roll attempt fails, a backward flip (i.e. the opposite direction) may be attempted
 - f) An assistant may be helpful to facilitate the ECV
- 1.7 Stop the procedure if the woman is feeling too much discomfort or if the fetal heart rate is atypical or abnormal (non-reassuring). Most atypical or abnormal FHR patterns will resolve. If the FHR does not recover with intrauterine resuscitation, an emergency C/S must be done.
- 1.8 Fetal surveillance (i.e., a Non-stress-test (NST)) is continued for a minimum of 20 minutes after an attempted ECV, whether or not the ECV was successful.
- 1.9 If the Version was successful, the woman should continue to receive antenatal care and await labor. If the Version was not successful, discuss appropriate arrangements for the woman's ongoing care and choice of delivery method.
- 1.10 Administer Rh immunoglobulin 300 micrograms to unsensitized Rh negative women. Routine assessment with the Kleihauer- Betke test for the possibility and degree of a fetomaternal bleed is not necessary since it has been shown that only 0.08% of bleeds with ECV will be greater than 30 ml (300 micrograms of Rh immunoglobulin will cover up to a 30 ml bleed).
- 1.11 Advise the woman to report any abdominal pain, symptoms of labor, bleeding, fluid leakage, fever, or decreased fetal movement.

2. Prerequisites for ECV

- 2.1 Gestational age 37 weeks or greater
- 2.2 No contraindication to labor
- 2.3 Fetal well-being established prior to procedure (i.e. Non-stress test (NST) or Biophysical profile)
- 2.4 Adequate amniotic fluid volume
- 2.5 Availability of ultrasound
- 2.6 Position of fetus known prior to procedure

TITLE	EFFECTIVE DATE	PAGE
External Cephalic Version	June 1, 2017	4 of 5

2.7 Facilities and personnel available for immediate Cesarean section

3. Contraindications

3.1 Any contraindications to labor, e.g., Placenta previa , atypical or abnormal fetal heart rate (FHR) pattern, compromised fetus; active genital herpes simplex infection; previous Classical uterine incision or other previous uterine surgery that would increase the risk of uterine rupture (Hysterotomy , Myomectomy , full-thickness uterine wall incision, etc.)

3.2 Antepartum hemorrhage

3.3 Some major fetal anomalies

3.4 Multiple gestation (except delivery of the second twin)

3.5 Severe Oligohydramnios

3.6 Ruptured membranes

4. Risks associated with ECV

4.1 Placental abruption (0.4%-1.0%)

4.2 Rupture of membranes and subsequent possible cord prolapse

4.3 Labor

4.4 Fetal heart rate (FHR) abnormalities, the most common being transient bradycardia (1.1%-47%) (NOTE: Fetal bradycardia necessitating an emergency cesarean delivery is uncommon 0.5 %).

4.5 Alloimmunization /fetomaternal hemorrhage (0%-5%)

DEFINITIONS

External Cephalic Version (ECV): is a procedure in which a fetus is turned *in utero* from a non-cephalic to a Cephalic presentation by manipulation of the maternal abdomen

Non-stress-test (NST): a measure of fetal well-being using an external fetal monitor and well-defined parameters for interpretation

Biophysical profile (BPP): a test of fetal well-being using real time ultrasonography to measure amniotic fluid, fetal breathing movements, fetal gross body movements, fetal fine body movements and may include a non-stress test. Points (0, 1, or 2) are given for each measurement (including the NST) according to established criteria for a score out of a maximum of 10

TITLE	EFFECTIVE DATE	PAGE
External Cephalic Version	June 1, 2017	5 of 5

Position: the orientation of the fetal presenting part

REFERENCES

Salus Global Corporation, MORE^{Ob}, 15th Edition, Sep-27-2016

VERSION HISTORY

Date	Action Taken
January 01, 2012	Revised
June 07, 2017	Revised
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