

Maine Medical

PARTNERS

Women's Health

A department of Maine Medical Center

External Cephalic Version

Breech presentation occurs in 3-4% of term pregnancies. The goal of external cephalic version (ECV) is to increase the proportion of vertex presentations at term, and thereby increase the chances of a vaginal delivery. Success rates from 35-85% are reported, with an average of 58%.¹

Women with breech presentation near term and no contraindication should be offered an external version attempt. However, external cephalic version should be attempted only after 37w0d and in settings where cesarean delivery services are immediately available.¹

Indications:

Non-vertex infants, after 37w0d gestation

Exclusion Criteria:

Any contraindication to a vaginal delivery, including but not limited to:

- Placenta previa or vasa previa
- Major fetal anomaly
- Prior classical c-section
- Uterine anomaly
- Third trimester bleeding
- Non reassuring fetal status

Relative Contraindications

- Labor
- Ruptured membranes
- Fetal macrosomia
- Evidence of uteroplacental insufficiency, *i.e.* IUGR, oligohydramnios, abnormal Doppler studies

Adverse Reactions:²

- Labor
- NRFHT
- Placental abruption (<1%)
- Vaginal Bleeding (1.5%)
- PROM within 48 hours of ECV (2%)
- Cord prolapse (<0.5%)

Method:

Preparation

- Obtain informed consent, full H&P should be documented in chart
- Patient should be NPO 8 hours prior to the procedure due to the potential for urgent delivery via cesarean section

Pre-Procedure

- Ensure stable maternal vital signs
- Perform a bedside ultrasound to confirm presentation, placental location, AFI, and rule out anomalies that are a contraindication to vaginal delivery
- Ensure there is a reactive NST prior to ECV
- Obtain IV access; CBC and type and screen should be drawn
- Order RhoGam if indicated, for post-procedure administration
- Request anesthesia to see and consent patient

Procedure

- Consider tocolysis with 0.25mg SQ terbutaline 10-15 minutes before ECV
***Recommendation (ACOG) for tocolysis to improve success rate is supported by inconsistent scientific evidence; therefore use remains optional.* ^{1,3-6,9}
***Currently there is not enough consistent evidence to recommend spinal or epidural anesthesia during ECV attempts, though some studies have reported higher success rates⁷⁻⁸*
- Place patient in the supine or slight reverse Trendelenburg position
- ECV attempt should be discontinued if the patient has intolerable discomfort, or if non-reassuring fetal status develops

Post-Procedure

- Perform EFM for at least 60 minutes. A reactive NST should be obtained before discharge
- Administer RhoGam if indicated

References:

1. ACOG Practice Bulletin Number 161; External Cephalic Version, 2016, (Reaffirmed 2019).
2. Regalia AL, Curiel P, Natale N, Galluzzi A, Spinelli G, Limonata Ghezzi GV, et al. Routine use of external cephalic version in three hospitals. Birth 2000; 27:19-24.
3. Robertson AW, Kopelman JN, Read JA, Duff P, Magelssen DJ, Dashow EE. External cephalic version at term: Is a tocolytic necessary? Obstet Gynecol 1987; 70:896-99.
4. Fernandez CO, Bloom SL, Smulian JC, Ananth CV, Wendel GD. A randomized placebo-controlled evaluation of terbutaline for external cephalic version. Obstet Gynecol 1997; 90:775-79.
5. Hofmeyr GJ. Interventions to help external cephalic version for breech presentations at term. Cochrane Database Syst Rev 2004; CD000184.

6. Stock A, Chung T, Rogers M, Wai Ming W. Randomized, double-blind, controlled comparison of Ritodrine and Hexoprenaline for tocolysis prior to external cephalic version. *Aust NZ J Obstet Gynaecol* 1993; 33:265-268.
7. Carlan SJ, Dent JM, Huckaby T, Whittington EC, Shaefer D. The effect of epidural anesthesia on safety and success of external cephalic version at term. *Anesth Analg* 1994;79:525-28.
8. Schorr SJ, Speights SE, Ross EL, Bofill JA, Rust OA, Norman PF, et al. A randomized trial of epidural anesthesia to improve external cephalic version success. *Am J Obstet Gynecol* 1997;177:1133
9. Cluver C, Gyte GM, Sinclair M, Dowswell T, Hofmeyr GJ. Interventions for helping to turn term breech babies to head first presentation when using external cephalic version. *Cochrane Database of Systematic Reviews* 2015, Issue 2.