

External Cephalic Version

What is an External Cephalic Version (ECV)?

Sometimes babies are in positions within the uterus around the time they are due that are not head down. Sometimes they are feet or bottom first (breech) or sideways (transverse). In order for vaginal delivery to occur the safest way possible, the baby should be head down. An ECV is the act of manipulating the baby from the outside into a head down position.

Current guidelines by the American College of Obstetrics and Gynecology recommend a cesarean delivery for all babies in a persistent breech presentation. Transverse presentations must be delivered by cesarean section as well.

Contraindications to ECV (Who SHOULDN'T have one):

- *Women who need a cesarean section regardless of presentation (i.e. placenta previa).
- *Ruptured membranes (if your water has already broken).
- *Non reassuring fetal heart tracings (if your baby is in distress).
- *Hyperextended fetal head.
- *Significant fetal or uterine anomaly.
- *Abruptio placentae (separation of the placenta from the uterine wall, often accompanied by heavy vaginal bleeding).
- *More than 1 fetus in the uterus.
- *Previous uterine surgery, including cesarean section, that would significantly increase the risk for uterine rupture.

OTHER REASONS WE MIGHT NOT PERFORM AN ECV:

- *Significantly elevated maternal blood pressure
- *Impaired Fetal Growth (less than 10th % for growth)
- *Low amniotic fluid

Risks of ECV:

- 1. <u>Failure to turn the baby</u>: This occurs more often in women who have never had a baby before, certain positions of the baby or placenta, if the baby is already engaged in the pelvis, low amniotic fluid, or tight abdominal muscles.
- 2. <u>Abruption</u>: When the placenta is sheared from the uterine wall, which can cause significant bleeding and can lead to an emergent cesarean section.
- 3. <u>Non-reassuring Fetal Assessment</u>: Fetal heart rate changes can be seen indicating that the baby is in distress, which can be caused by umbilical cord entanglement or compression, abruption, etc.
- 4. Labor or Rupture of Membranes.
- 5. <u>Uterine Rupture</u>: This is rare without a previous uterine scar, but would necessitate an emergent cesarean section.

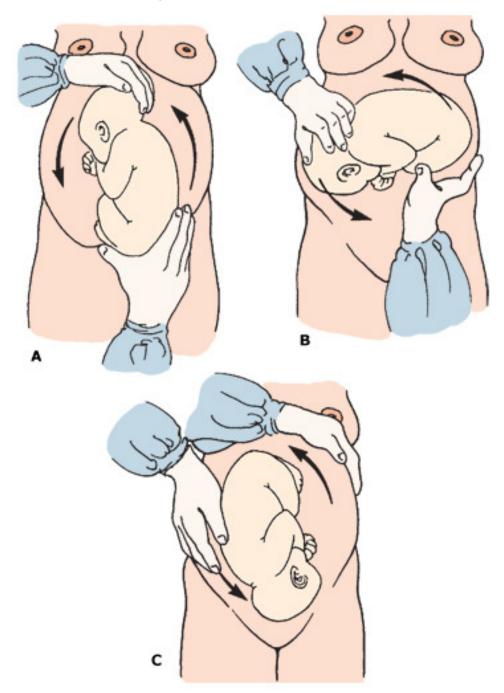
Alternatives to ECV:

- 1. Postural Changes:
 - This involves having the mother get into different positions to help the baby turn, including the knee-chest position both with and without a full bladder, as well as lying on her back with her head lower than her legs with a wedge shaped cushion to elevate her pelvis. Some women lay on an ironing board with the foot end propped up.
 - There are no good studies to indicate that this helps.
- 2. Moxibustion:
 - Sometimes performed in conjunction with acupuncture, moxibustion is a method from Chinese medicine in which an herb is burnt close to the pinky toe for 20-60 minutes 1-2 times a day from twice weekly to daily for up to 2 weeks.
 - The data is conflicting as to the effectiveness of this procedure.
- 3. Expectant Management:
 - This is basically watching to see if the baby will turn on his or her own by waiting for labor beyond 39 weeks. The risk to this is that a cesarean section in labor can be more dangerous for both the baby and the mother, as well as problems that could arise if cord were to drop in front of the baby (cord prolapse).

What to expect the day of the procedure:

- 1. When you arrive, you will have blood taken and an IV started. The baby will be placed on the monitor to make sure the heart rate is reassuring for a minimum of 20 minutes. We will ask that you not have eaten or had anything to drink for at least 6 hours. An ultrasound will be performed to review the baby's position and where the placenta is located. Sometimes patients are given a medication in their skin to help relax the uterus. This medication makes some women feel like their heart is racing.
- 2. Using an ultrasound to monitor the baby's heart rate and position periodically, we will then attempt the procedure (see next page). Usually, an ECV is performed with 2 physicians working together. At any time that you are uncomfortable, you may ask us to stop and we will. There is discomfort involved with the procedure, but it should not be painful. The procedure is demonstrated in the illustrations from UpToDate on the next page.
- 3. After the procedure, you will remain on labor and delivery for fetal heart rate monitoring for approximately 2 hours. If you are Rh negative, you will receive a shot of rhogam. You may have a second blood draw. Most often, women then return home to await labor (if the version was successful), or the appointed date for cesarean section (if it was not successful). Occasionally, if the presentation has been variable, the gestational age is 39 weeks or more, and the woman's cervix favorable, we may recommend breaking the water and initiating an induction to make sure that the baby remains head down shortly after the procedure.

Movements in an External Cephalic Version:



Fetus is converted from breech to vertex presentation in (A-C).

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