

Breech presentation

occurs when the cephalic pole is in the uterine fundus. Major congenital anomalies occur in 6.3% of term breech presentation infants compared to 2.4% of vertex presentation infants.

-Incidence: Breech presentation occurs in 25% of pregnancies at less than 28 weeks' gestation, 7% of pregnancies at 32 weeks' gestation, and 3% to 4% of term pregnancies in labour.

The three types of breech presentation include the following:

1-Frank breech (48% to 73%) occurs when both hips are flexed and both knees are extended.

2-Complete breech (5% to 12%) occurs when the fetus is flexed at the hips and flexed at the knee.

3-Incomplete, or footling breech (12% to 38%), occurs when the fetus has one or both hips extended.

Risks

The breech presentation is associated with risk of cord prolapse and head entrapment. The risk of cord prolapse is 15% in footling breech, 5% in complete breech, and 0.5% in frank breech. If the fetal neck is hyperextended, a risk of spinal cord injury exists.

Risks of Vaginal Breech Delivery: Patients with fetuses in a complete or frank breech presentation may be considered for vaginal delivery. Cesarean section poses the risk of increased maternal morbidity and mortality. Vaginal breech delivery, however, poses increased risk to the fetus of the following:

1-Mortality (three to five times greater mortality rate if the fetus is heavier than 2,500 g and does not have a lethal anomaly)

2-Asphyxia.

3-Cord prolapse .

4-Birth trauma.

5-Spinal cord injuries (occur in 21% of vaginal deliveries if deflexion is present)

Vaginal Delivery:

Current American College of Obstetricians and Gynecologists (ACOG) recommendations are that planned vaginal delivery of a term singleton breech may no longer be appropriate. For patients who present in advanced labour with a fetus in the breech presentation for whom delivery is imminent, a trial of labour may be attempted if the following circumstances exist: Breech is frank or complete; the estimated fetal weight is less than 3,800 g; pelvimetry results are adequate; the fetal head is flexed; anesthesia is immediately available and a prompt cesarean section may be performed; the fetus is monitored continuously; and an obstetrician, who is experienced with vaginal breech delivery, and a pediatrician are present. A cesarean section should be performed in the event of any arrest of labour.

The goal in vaginal breech delivery is to maximize cervical dilation and maternal expulsion efforts to maintain flexion of the fetal vertex.

In breech presentation, the fetus usually emerges in the sacrum transverse or oblique position. As crowning occurs (the bitrochanteric diameter passes under the symphysis), an episiotomy should be considered. One should not yet assist the delivery.

When the umbilicus appears, one may place fingers medial to each thigh and press out laterally to deliver the legs (Pinard maneuver). The fetus should then be rotated to the anterior

sacrum position, and the trunk can be wrapped in a towel for traction.

When the scapulas appear, fingers should be placed over the shoulders from the back. The humerus should be followed down, and each arm rotated across the chest and out (Lovsett's maneuver). To deliver the right arm, the fetus is turned in a counterclockwise direction; to deliver the left arm, the fetus is turned in a clockwise direction.

If the head does not deliver spontaneously, the vertex must be flexed by placing downward traction and pressure on the maxillary ridge (Mauriceau-Smellie-Veit maneuver). Suprapubic pressure may also be applied. Piper forceps may be used to assist in delivery of the head.

For delivery of a breech second twin, ultrasonography should be available in the delivery room. The operator reaches into the uterus and grasps both feet, trying to keep the membranes intact. The feet are brought down to the introitus, then amniotomy is performed. The body is delivered to the scapula by applying gentle traction on the feet. The remainder of the delivery is the same as that described earlier for a singleton breech.

Entrapment of the head during breech vaginal delivery may be managed by one or more of the following procedures:

1-Duhrssen's incisions are made in the cervix at the 2, 6, and 10 o'clock positions. Either two or three incisions can be made. The 3 and 9 o'clock positions should be avoided due to the risk of entering the cervical vessels and causing hemorrhage.

2-Cephalocentesis can be performed if the fetus is not viable. The procedure is performed by perforating the base of the skull and suctioning the cranial contents.

Factors that strengthen recommendations for a CS:

- 1- Large or small baby(EBW >3.5 or <2.5 kg).
- 2- Small pelvis on pelvimetry or very flat sacrum.
- 3- Primigravida.
- 4- Previous CS.
- 5- Extended neck.

Factors that increase the likelihood of a successful vaginal breech delivery:

- 1- Normal size baby (2.5-3.5 kg).
- 2- Good pelvimetry.
- 3- Flexed neck.
- 4- Multiparous.
- 5- Breech deeply engaged.
- 6- Positive mental attitude of women and partner.
- 7- Obstetric unit with staff familiar with breech delivery.

External Cephalic Version

Indication for performing external cephalic version is persistent breech presentation at term. Version is performed to avoid breech presentation in labour.

Risks include cord accident, placental separation, fetal distress, fetal injury, premature rupture of membranes, and fetomaternal bleeding (overall incidence is 0% to 1.4%). The most common risk is failed version.

Success rate for external cephalic version ranges from 35% to 86%, but in 2% of cases the fetus reverts back to breech presentation.

Technique: A gestational age of at least 36 weeks and reactive nonstress test must be established before the procedure, and informed consent must be obtained. Version is generally

accomplished by applying a liberal amount of lubrication then transabdominally grasping the fetal head and fetal breech and manipulating the fetus through a forward or backward roll. Ultrasonographic guidance is an important adjunct to confirm position and monitor fetal heart rate. Tocolysis and spinal or epidural anesthesia may be used and may improve success rates. After the procedure, the patient should be monitored continuously until the fetal heart rate is reactive, no decelerations are present, and no evidence of regular contractions exists. Rh-negative patients should receive Rh₀ (D) immune globulin (RhoGAM) after the procedure because of the potential for fetomaternal bleeding.

Factors associated with failure include obesity, oligohydramnios, deep engagement of the presenting part, and fetal back posterior. Nulliparity and an anterior placenta may also reduce the likelihood of success.

Contraindications to external cephalic version include conditions in which labour or vaginal delivery would be contraindicated (placenta previa, previous classical cesarean section, etc.). Version is not recommended in cases of ruptured membranes, third trimester bleeding, oligohydramnios, multiple gestations, or if labour has begun.

