Breech presentation

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Objective

To know how to diagnose breech presentation

To know how to manage breech presentation antenatal and in labor

Prevalence

- Breech is commonly encountered malpresentation occur in 3-4 %of term pregnancy
- at 30 wks gestation 20-30%

Predisposing factor for breech presentation

A. Maternal

1. Fibroids.

2. Congenital uterine abnormalities (e.g. bicornuate uterus).

3. Uterine surgery.

B. Fetal/placental

1. Multiple gestation

2. Prematurity.

3. Placenta praevia.

4. Abnormality (e.g. anencephaly or hydrocephalus).

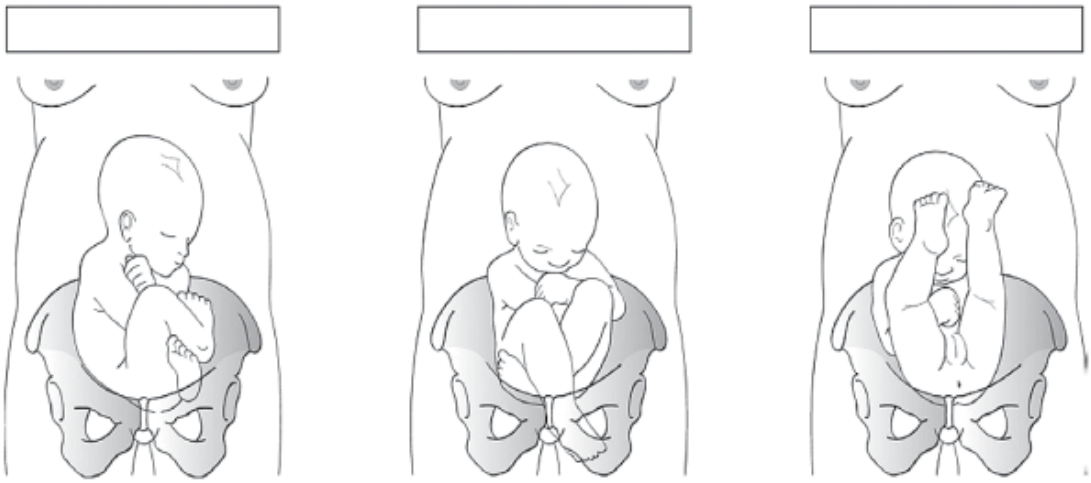
5. Fetal neuromuscular condition.

6. Oligohydramnios.

7. Polyhydramnios.

Type of breech

a. extended breech between 50 and 70% of breech presentations manifest with hips flexed and knees extended
b. Complete (or flexed) breech is more common in multiparous women and constitutes 5–10% at term (hips and knees flexed).
c. Incomplete or footling breech (10–30%) presents with one or both hips extended, or one or both feet presenting and is most strongly associated with cord prolapse (5–10%).
d. Knee presentation is rare



Diagnosis

A. examination

Clinical diagnosis may miss up to 20% of breech presentations, relying on identifying the head as a distinct hard spherical hard mass to one or other side under the hypochondrium which distinctly ‘ballots’ . In such cases the breech is said to feel broader .

Auscultation may locate the fetal heart above the maternal umbilicus and ultrasound confirmation should be considered.

Vaginal examination :

Fetal buttock is felt if cervix is dilated and membrane rupture the natal cleft is felt feet felt alone or close to the buttock cord may also be felt.

Management of Breech presentation

According to gestational age
Preterm
No sign of labour ..... Conservative, wait for spontaneous version
In labour ....CS vs vaginal delivery

Term breech
No labour or too early labour and intact membrane .....ECV, CS
Advanced labour .....CS vs. Vaginal delivery

Antenatal management of breech presentation

- If a breech presentation is clinically suspected at or after 36 weeks, this should be confirmed by

ultrasound scan for fetal biometry, amniotic fluid volume, the placental site and the position of the fetal legs. exclusion of nuchal cord or hyperextension of the fetal neck. The scan should also look for any anomalies previously undetected.

- management options available at this point should be discussed with the woman. These are external cephalic version (ECV), vaginal breech delivery and elective caesarean section(the best method of delivering a term breech singleton is by planned caesarean section)

External cephalic version

- ECV is a relatively straightforward and safe technique
- Success rates around %50 and are higher in multiparous women who tend to have lax abdominal musculature
- The procedure is performed at or after 37 completed weeks' gestation by an experienced obstetrician at or near delivery facilities
- CTG for 30–40 min prior to and after ECV should provide confirmation of fetal health
- The woman is laid flat with a left lateral tilt having ensured that she has emptied her bladder and is comfortable.
- ultrasound guidance,
- the breech is elevated from the pelvis and one hand is used to manipulate this upward in the

direction of a forward role whilst the other hand applies gentle pressure to flex the fetal head and bring it down to the maternal pelvis The procedure can be mildly uncomfortable for the mother and should last no more than 10 minutes.

- important to administer anti-D if the woman is rhesus negative.

Contraindications to ECV

1. Fetal abnormality (e.g. hydrocephalus)
2. When vaginal delivery is contraindicated e.g placenta previa.
3. Oligohydramnios or polyhydramnios.
4. History of antepartum haemorrhage.
5. Previous caesarean or myomectomy scar on the uterus.
6. Multiple gestation.
7. Pre-eclampsia or hypertension.
8. Plan to deliver by caesarean section anyway.
9. Ruptured membranes
10. IUGR
11. Abnormal CTG
12. Major uterine anomaly

Risks of ECV

1. Placental abruption.
2. Premature rupture of the membranes.
3. Cord accident.

4. Transplacental haemorrhage (remember anti-D administration to rhesusnegative women).
5. Fetal bradycardia.

vaginal breech delivery

indicated Maternal choice and the failure to detect breech presentation until very late in labour.

Pre-requisites for vaginal breech delivery

1. GA >36 wks
2. extended or flexed breech
3. no evidence of feto-pelvic disproportion with a pelvis clinically thought to be adequate
4. estimated fetal weight of 2,500-3,500 g
5. no evidence of hyperextension of the fetal head and fetal abnormalities that would preclude safe vaginal delivery should be excluded.

Management of labour

- Fetal wellbeing and progress of labour should be carefully monitored.
- An epidural analgesia it can prevent pushing before full dilatation.
- Fetal blood sampling from the buttocks
- There should be an operator experienced in delivering breech babies
- Spontaneous onset of labour is preferred and labour management is similar to vertex presentation.

- Where progress of labour is poor and uterine contractions are inadequate, oxytocin augmentation can be used juidiciously with early resort to emergency CS

Technique

- The buttocks deliver in the sacro-tranverse position.
- The mother should be encouraged to push with contractions‹aiming for an unassisted delivery up to and beyond the level of the umbilicus. There is no need to pull down a loop of cord
- If the legs are flexed, they will deliver

spontaneously. If extended delivered using Pinard's manoeuvre. This entails using a finger to flex the leg at the knee and then extend at the hip,

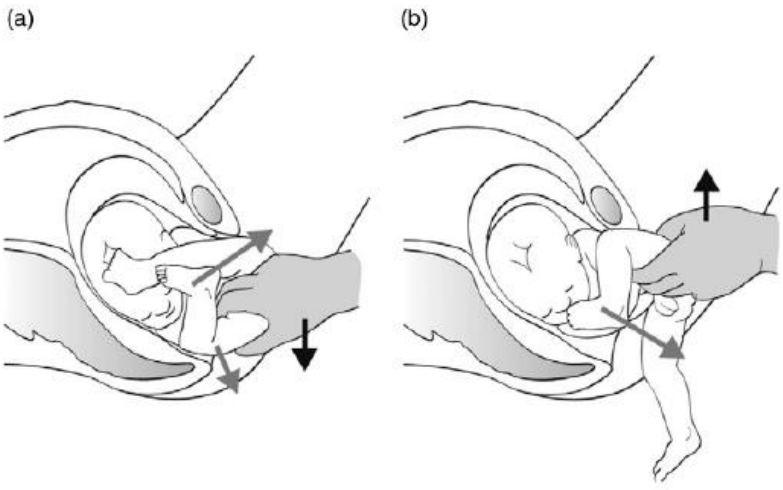


Fig. 26.4 Delivery of extended legs by gentle abduction of the thigh with hyperflexion at the hip, followed by flexion at the knee: (a) right leg; (b) left leg.

- Delivery of the shoulders Loveset's manoeuvre

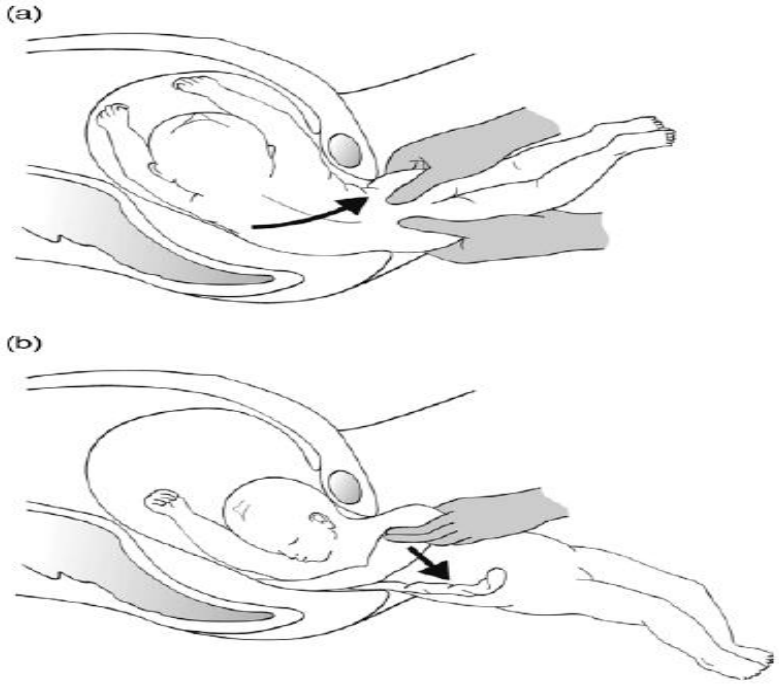


Fig. 26.5 Løvset's manoeuvre for extended arms: (a) rotation to bring the posterior (left) arm to the front followed by (b) delivery of the left arm (now anterior) from under the pubic ramus.

Delivery of the head

1. Mauriceau–Smellie–Veit manoeuvre two fingers are placed on the maxilla, lying the baby along the forearm .Hook index and fourth fingers of the other hand over the shoulders with the middle finger on the occiput to aid flexion. Apply traction to the shoulders with an assistant applying suprapubic pressure if needed
2. Burns–Marshall methodgrasp the feet, apply gentle traction and swing the baby gently up and over the maternal abdomen until the mouth and nose appear.
3. Forceps by piper and Kielland's forceps can be useful

4. The upright breech technique

Entrapment of the after-coming head

This rare complication

1) If the fetal back is allowed to rotate posteriorly
2) In preterm delivery, the body can slip through an incompletely dilated cervix .If the cervix cannot be ‘stretched up’ surgical incisions are made in the cervical ring at 2, 6 and 10 o’clock (Dührssen incisions)

Risk of vaginal breech delivery

- Cord prolapse
- Visceral injury
- Fracture of femur and humerus
- Brachial plexus injury
- Cord compression
- After coming head
- Tentorial tear and intracranial haemorrhage