Breech Presentation

Breech presentation or podalic:-

when buttock of fetal occupies the lower segment of uterus, it is called breech presentation.

Breech presentation occurs in 3-4% of all deliveries

Types of breech:-

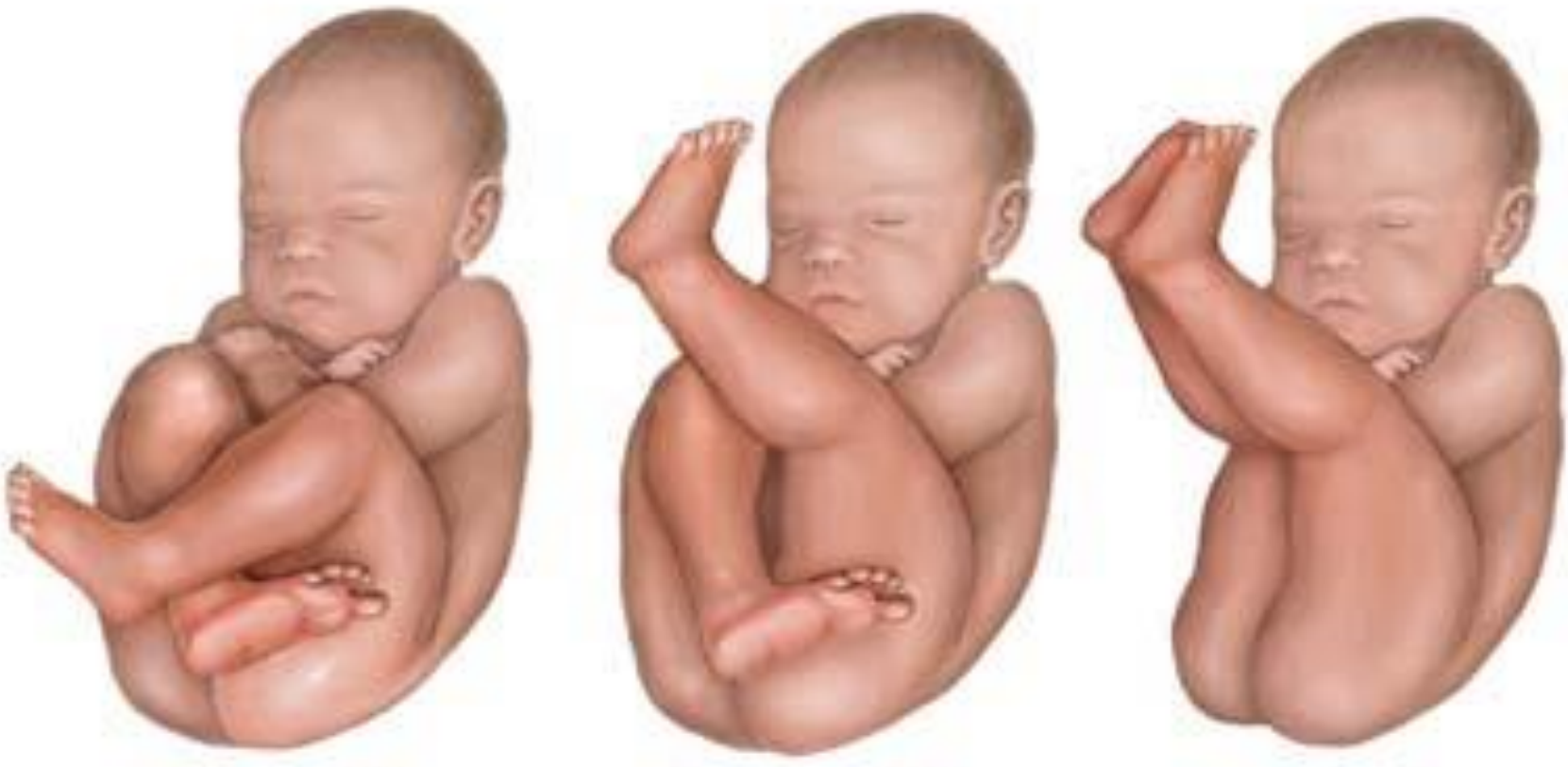
1. Full/Complete Breech (cannonball position) (5-10%)
2. Incomplete Breech
3. Frank Breech (pike position) (50-70%)
4. Footling Breech (10-30%)

Frank Breech

Complete Breech

Footling Breech

Variations of the breech presentation



Complete breech

Incomplete breech

Frank breech

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Types of breech:-

1. Full/Complete Breech:- arms & legs flexed
2. Incomplete Breech
3. Frank Breech:- arms flexed but legs extended straight up over head
4. Footling Breech:- one or both feet extended downward and may exit the birth canal first.

- Lie:-
  - Longitudinal
- Presentation:-
  - Breech
- Denominator:-
  - Sacrum

The positions are:-

1. Left sacro-anterior(LSA) – commonest
2. Right sacro-anterior (RSA)
3. Left sacro- posterior(LAP)
4. Right sacro-posterior (RSP)

The Six Breech Positions

Etiology:

- Prematurity(due to rotation) commonest
- Factor preventing spontaneous version: --
  - Breech with extended legs
  - Twin
  - Oligohydramnios
  - Congenital malformation of uterus;
    septate uterus, Bicornuate uterus
  - Short cord
  - Contacted pelvis

- Favorable adaptation:
  - Placenta praevia
  - Contracted pelvis
- Undue mobility of fetus
  - Hydrocephalus
  - Multipara with lax abdomen

Recurrent breech:-

Recurrent breech means more than 3 consecutive breech pregnancy.

Causes:-

1. Congenital malformed uterus
2. Contracted pelvis
3. Cornual attachment of placenta

DIAGNOSIS:

- History:-

  -Previous breech presentation.

- Abdominal examination:-

  - Fundal grip:-hard, round ballottable head.
  - Lateral grip:- fetal back on one side palpable as smooth curve structure whereas limbs on other side felt small irregular structure.
  - Pelvic grip: broader, softer and irregular mass with ill define outline.
  - Fetal heart sounds: above the umbilicus - before engagement , below the umbilicus after engagement.

- P/V examination:-

  -During pregnancy:- soft and irregular part are felt.

  -During labour:- palpation of ischial tuberocities, sacrum and its spine, sole of foot, genitalias and anus.

- Investigations:-

  - USG:- confirmatory.

VAGINAL EXAMINATION

Presenting parts:

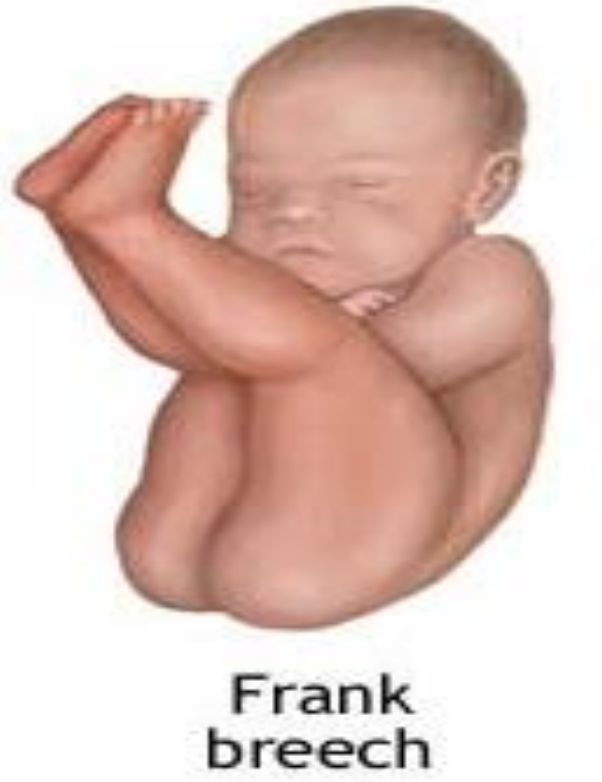
Complete breech presentations

palpation of ischial tuberocities, sacrum and its spine, sole of foot, genitalias and anus.

Complete breech

- Frank breech presentation:

palpation of ischial tuberocities, sacrum and its spine, genitalias and anus.



- Footling presentations

palpation of sole of foot

USG:

- Confirm the diagnosis
- Detect the gestational age and weight of baby
- Detect the fetal congenital abnormalities
- Detect the uterine anomalies
- Localization of placenta
- Liquor
- Attitude of the fetus

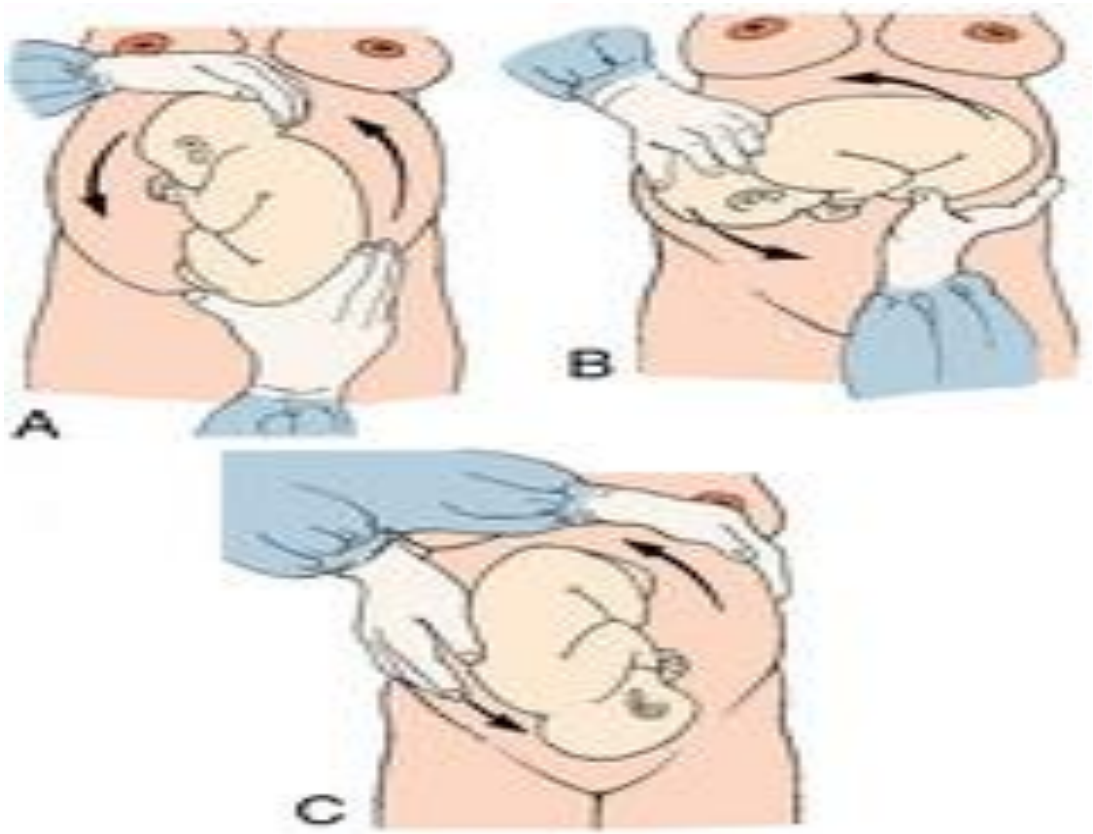
X-ray abdomen

Management of breech

A. Antenatal management
B. Management at term
C. Management during labour

A. Antenatal management:-

1. Identification of the complicating factors.
2. External cephalic version- if not contraindicated, at 32-34 wks.
3. If fails, repeat version after 1 wk.



B. Management at term:-

- Planning the method of delivery.

a. Elective caesarean section when indicated

b. Vaginal breech delivery when indicated.

Criteria/indication for vaginal breech delivery or caesarean section

Vaginal breech delivery	Caesarean section
1. Estimated foetal wt. 2.5-3kg. 2. Cervix soft and effaced. 3. Adequate maternal pelvis. 4. No high risk pregnancy. 5. Malformed foetus or dead fetus.	1. All primi gravida with breech. 2. Premature baby 3. Big baby. 4. Cervix unfavorable. 5. Inadequate maternal pelvis 6. High risk pregnancy. 7. Bad obstetrical history. 8. Elderly primi gravida 9. Early rupture of membrane 10. Breech associated with IUGR. 11. Footling breech.

C. Management during labour:-

First stage:-

1. Bed rest in left lateral position to prevent early rupture of membrane and cord prolapse.
2. If normal progress:- liquid diet
3. If delay progress/cs:- nothing per oral.
4. Adequate parenteral nutrition
5. Vaginal examination should be perform only when the membrane ruptures to exclude cord prolapse.
6. Adequate sedation and analgesia to prevent premature bear down.

Second stage:-

Three types of vaginal breech deliveries are described, as follows:

1. Spontaneous breech delivery:
2. Assisted breech delivery:
3. Breech extraction:

1. Spontaneous breech:-

- The expulsion of fetus occurs with very little assistance other than support of the fetus.
- This method should not be encourage.

2. Assisted breech delivery:-

- ✓ The delivery of the foetus is by assistance from the beginning to the end.

- ❖ The patients buttocks are brought to the edge of table and legs on lithotomy position. She is catheterized by sterile plastic catheter.
- ❖ Liberal medio-lateral episiotomy is done at crowning of buttocks under 1%xylocaine analgesia.
- ❖ Baby is allowed to delivered by its own up to umbilicus.
- ❖ Subsequently the shoulder is crowned on contraction and released posterior arm followed by anterior arm.

3. Breech extraction:-

- When the entire body of foetus is extracted by the obstetrician with minimal aid from the mother in an emergency situation such as foetal distress.

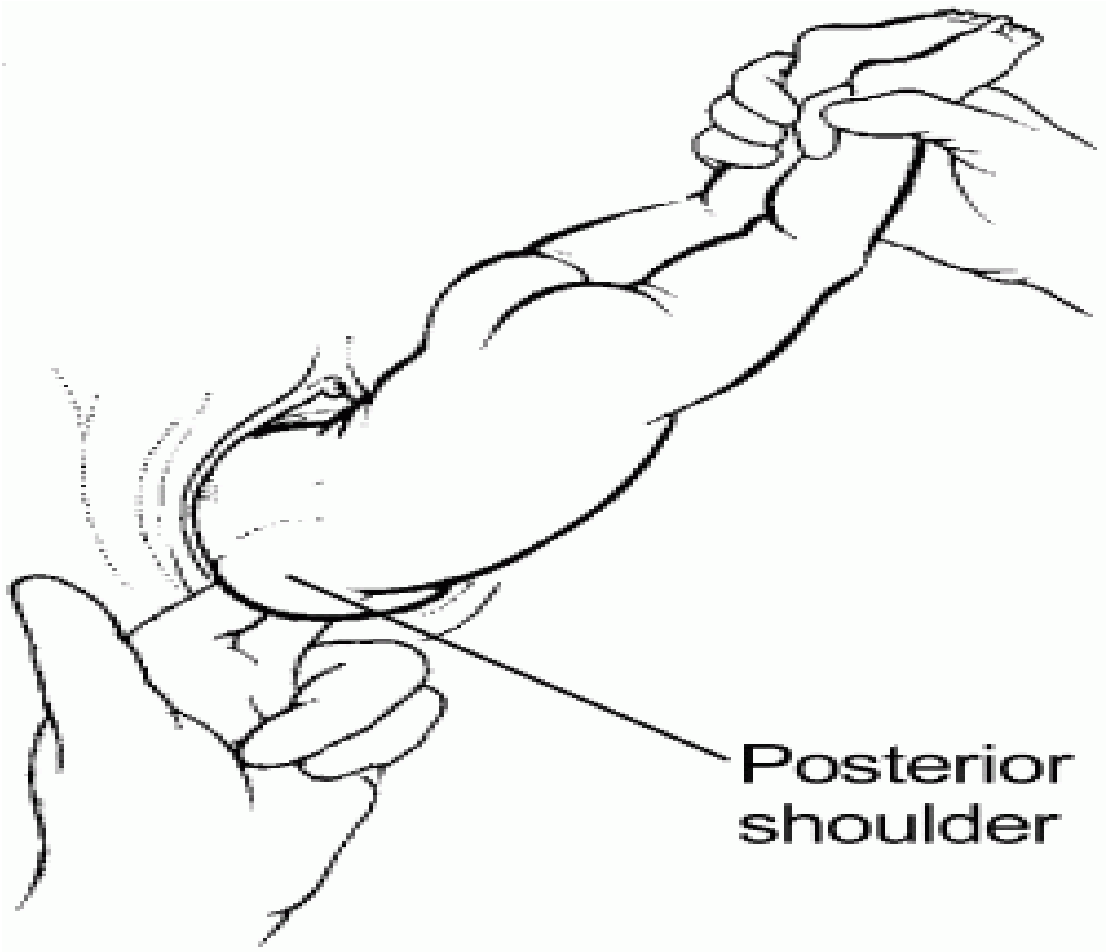
Delivery of after coming head in vaginal breech delivery

The following are common methods in use:-

1. Burn- Marshall method
2. Forceps delivery
3. Jaw flexion and shoulder traction (Mauriceau - Smellie - Veit technique)

Burn- Marshall method:-

1. Baby’s trunk is allowed to hang by its own for a while (never for more than 1 minute).
2. When the nape of the neck is visible under the pubic arch, baby’s trunk is gradually lifted up and swing up towards mother’s abdomen by holding baby’s legs above the ankles, thus head is delivered.
3. Meanwhile, the left hand to guard the perineum.


Posterior
shoulder

Forceps delivery:-

1. Forceps can be used as a routine and considered as best method if there is skilled person.
2. Baby is lifted up by the assistance by grasping baby's ankles.
3. Forceps is applied from below the trunk off baby on baby's head at level of biparietal diameters.
4. Head is gently delivered with mouth appearing at vulva when mouth is aspirated by mucus sucker.

Breech Presentation with Forceps Delivery

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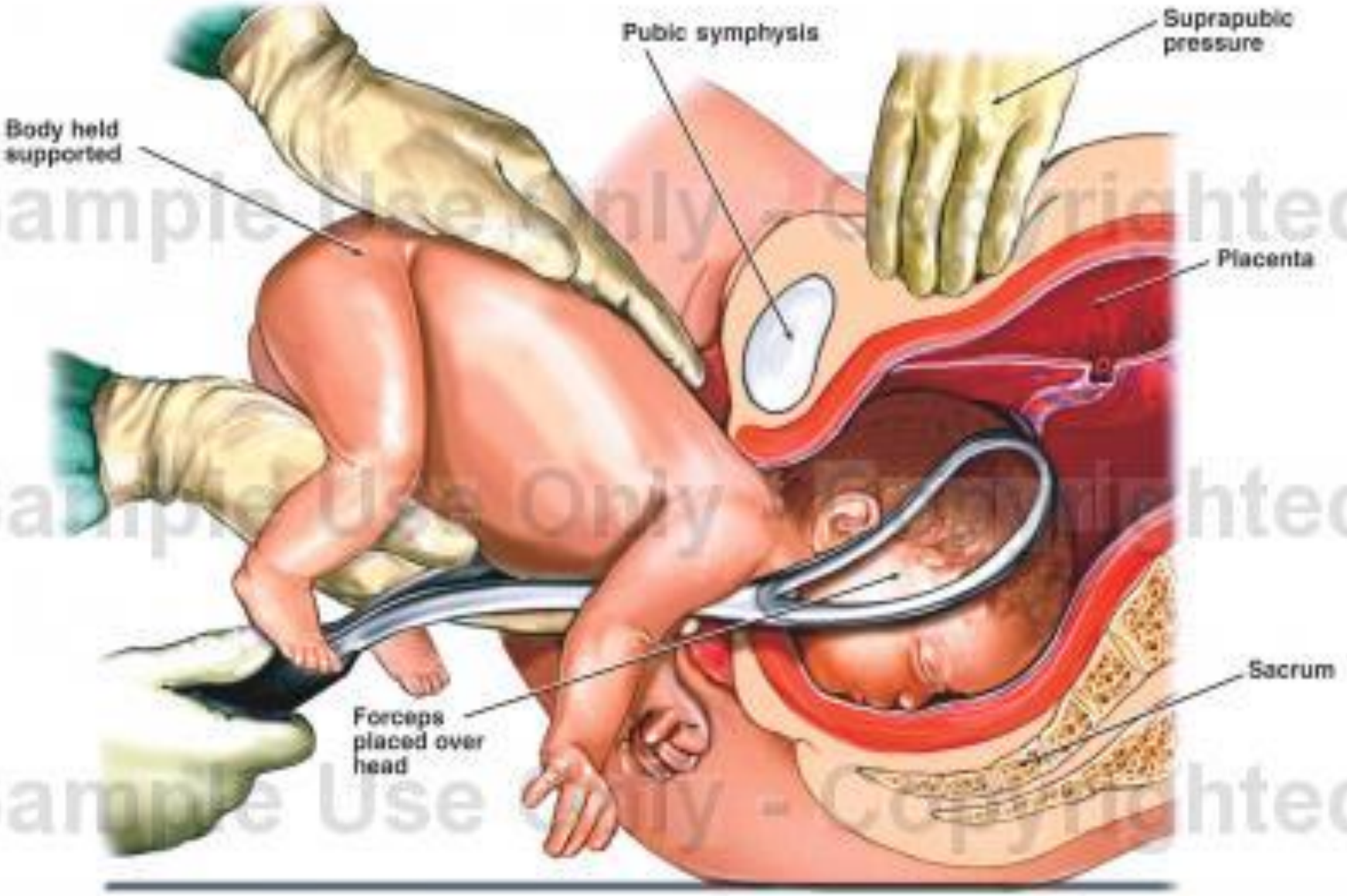

Sagittal View Through Abdomen and Pelvis

Jaw flexion & shoulder traction (Mauriceau - Smellie - Veit technique)

1. Head lying above the pelvic outlet.
2. The baby is placed on the supinated left forearm with the limbs hanging on either side.
3. The middle and index finger of the left hand are placed over the malar bones on either side. This maintains flexion of the head.
4. The ring and little fingers of the pronated right hand are placed on the baby's right shoulder, the index finger is placed on the left shoulder and the middle finger is placed on the sub-occipital region.

5. Traction is now given in downward and backward direction till the nape of neck is visible under the pubic arch. The assistance gives supra pubic pressure during the period to maintain flexion.
6. There after, the baby is carried in upward and forward direction towards the mother’s abdomen releasing the face, brow and lastly, the trunk is depressed to release the occiput and vertex.
7. The method should be employed preferably under general anesthesia.

Management of complicated breech delivery

- Problems which may arise during breech delivery:-

1. Arrest of buttock
2. Shoulder arrest
3. After coming head arrest

Arrest of the buttock :-

Causes:-

1 . Weak uterine contraction/uterine inertia:- mx. Is oxytocin injection

2 . Rigid perineum:- mx. Is liberal episiotomy

3. Breech with extended legs:-

mx. is Pinard's manoeuvre

Pinard's maneuver:-

1. pt. should be under GA.
2. The palmer surface of obstetrician is to be introduce facing the ventral surface of foetus.
3. Breech is pushed up at least to the level of symphysis pubis.
4. Middle and index fingers should apply pressure in popliteal fossa and abduction of the fossa done, which causes partial flexion of leg.
5. Head is flexed by other hand abdominally i.e externally.
6. The foot is brought down by grasping at the ankle by internal fingers.
7. Other leg is brought down in the same manner.

Shoulder arrest:-

Cause :-

1. Extended arms:- mx. is Lovset’s manoeuvre.

Lovset's maneuver:-

1. The maneuver should start only when the inferior angle of scapula is visible underneath the pubic arch.
2. The baby is grasped using both hands by femoropelvic grip keeping the thumbs parallel to the vertebral column.
3. The baby is lifted up slightly to cause lateral flexion. The trunk is rotate through 180^0 keeping the back anterior and maintaining downward traction. This will bring posterior arm to emerge under the pubic arch which is then hooked out.
4. The trunk is then rotate in the reverse direction keeping the back anterior to deliver the anterior shoulder under the symphysis pubis.

After coming head arrest :-

Causes:-

1. Deflexed head :- Jaw flexion & shoulder traction
2. Contracted pelvis:- em. c/s
3. High up head:- forceps delivery
4. Hydrocephalus:- craniotomy

COMPLICATIONS:

FETAL:

1. Birth asphyxia: due to
   - cord compression
   - delay delivery of head
   - retraction of the placenta
   - premature attempt for respiration while the head is still inside.

2. Intracranial haemorrhage:- due to sudden decompression of the un-moulded head. If it is delivered suddenly causing tear to the tentorium cerebelli and haemorrhage in the subarachnoid space.

Cont…….

4. Haematoma in sterno-mastoid muscle
5. Fractures & dislocation of cervical spines, femur, humerus, hip joint.
6. Visceral injuries:- rupture of liver, kidney due to pressure or faulty handling, prolapsed cord.
7. Nerve injuries:- stretching of the brachial plexus causes Erb's and klumpke's palsy.
8. All these leads to an Increase perinatal morbidity and mortality.

Maternal:

1. Increased operative delivery
2. Rupture of the uterus
3. Lacerations and tear of the cervix, vaginal.
4. Extensions of the episiotomy and deep perineal tears.
5. Anesthesia: cause uterine atony; postpartum hemorrhage
6. Maternal infection
7. Puerperal sepsis.

Prevention of the fetal and maternal complication:

- External cephalic version, if no contraindication
- If version is fail or contraindicated, delivery is done by elective CS.
- Vaginal breech delivery or manipulation should be done by a skilled obstetricians.