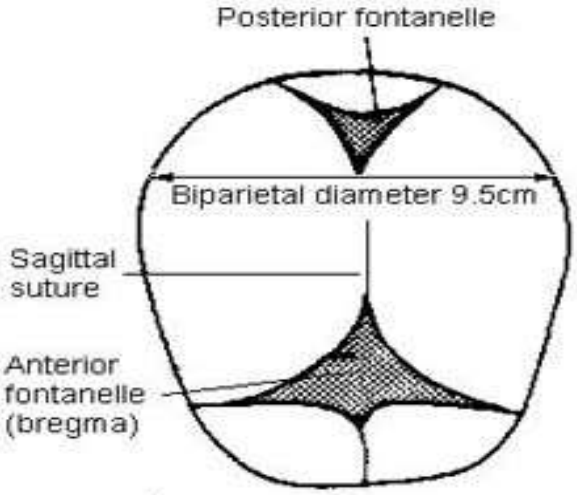
Malpresentation

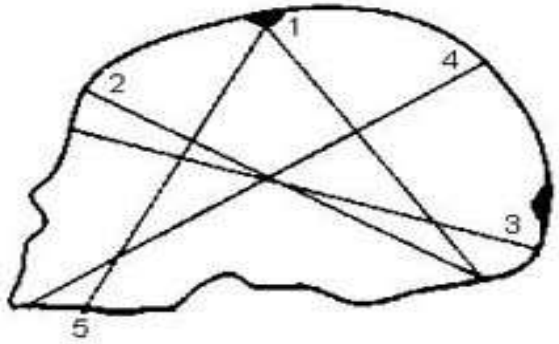
Malposition

Definition

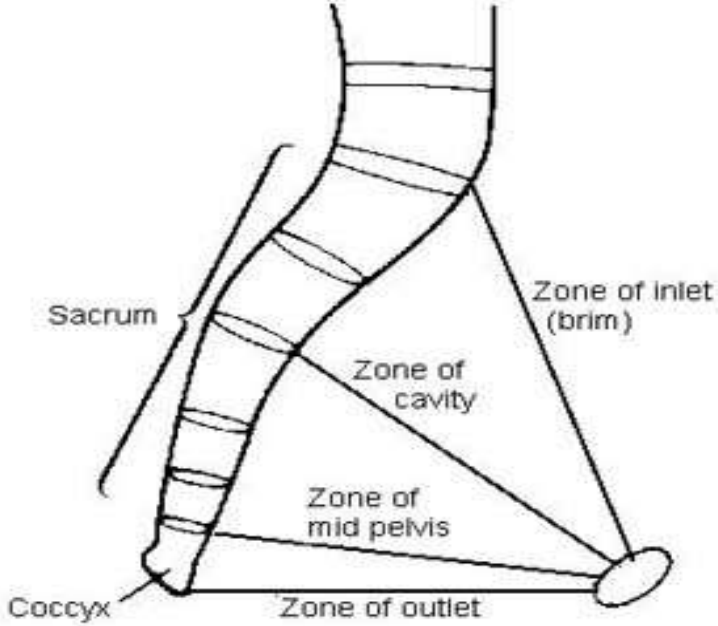
- **Malpresentation** = Fetal presenting part other than vertex & includes breech, brow, transverse, face.

- **Malposition** = Refers to positions other than an occipito-anterior position.





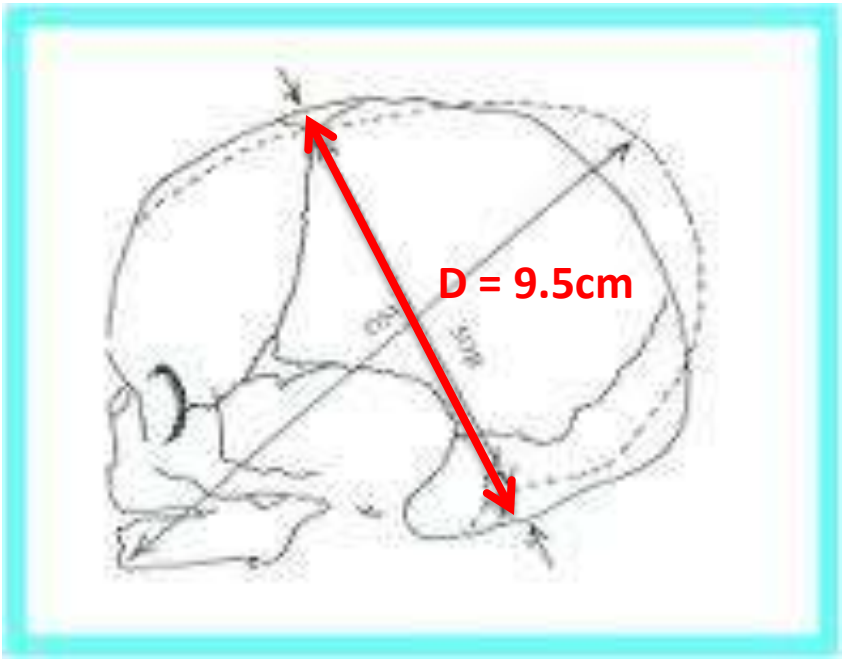
1 Suboccipitobregmatic 9.5cm flexed vertex presentation
2 Suboccipitofrontal 10.5cm partially deflexed vertex
3 Occipitofrontal 11.5cm deflexed vertex
4 Mentovertical 13cm brow
5 Submentobregmatic 9.5cm face



Commonest Presentation & Position

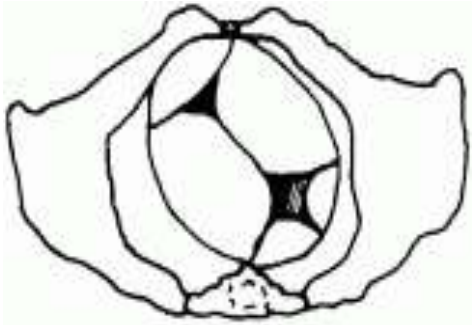
Suboccipito-Bregmatic

Presentation: Vertex
Attitude: Complete Flexion



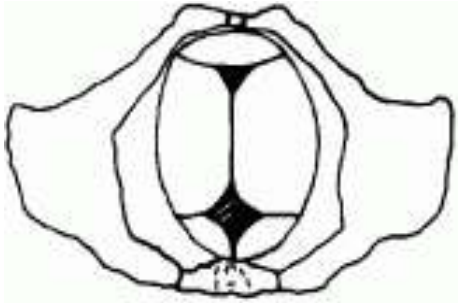
Extends from center of neck to bregma.

Occiput anterior positions



Right occiput anterior

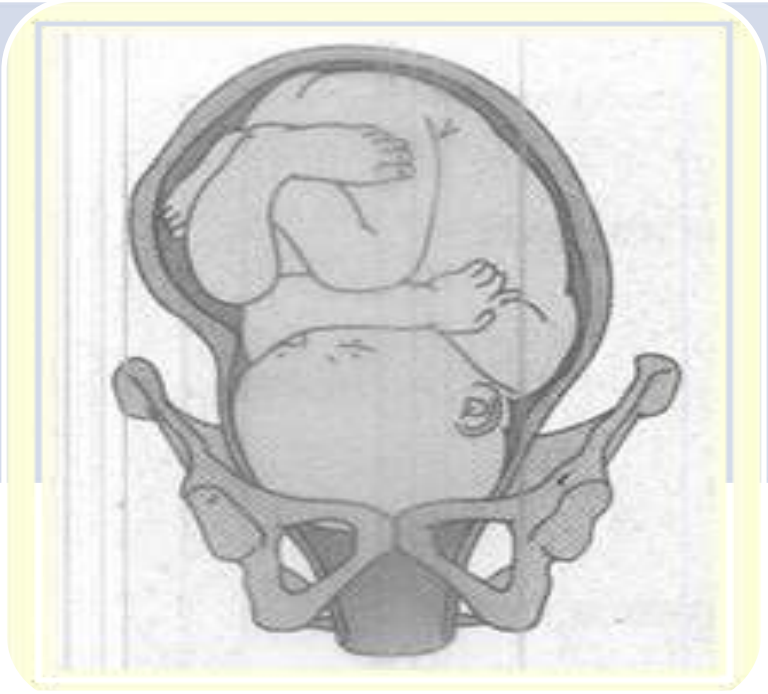
Left occiput anterior



Occiput anterior

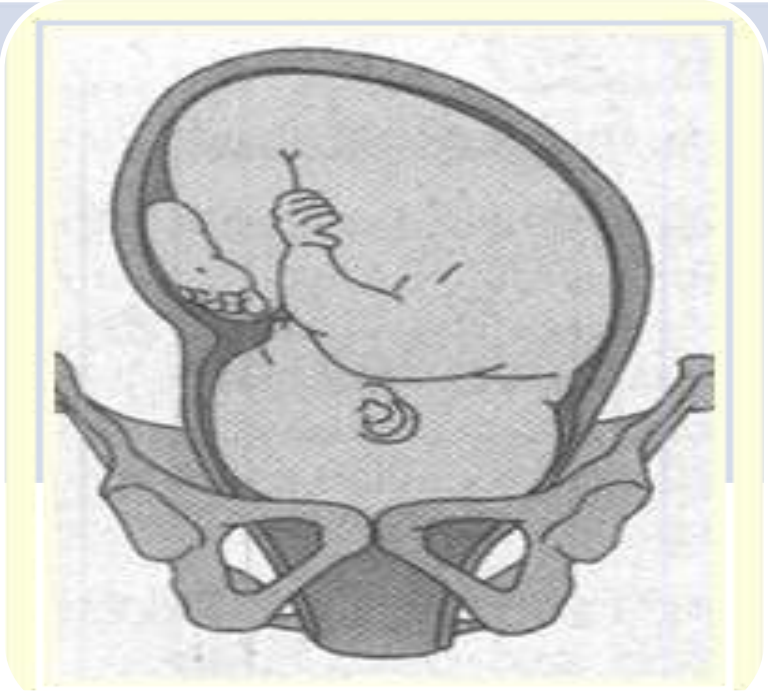
MALPOSITION

Malpositions include occipitoposterior and occipitotransverse positions of fetal head in relation to maternal pelvis.



Occiput Posterior

Arrested labor may occur when the head does not rotate and/or descend. Delivery may be complicated by perineal tears or extension of an episiotomy.



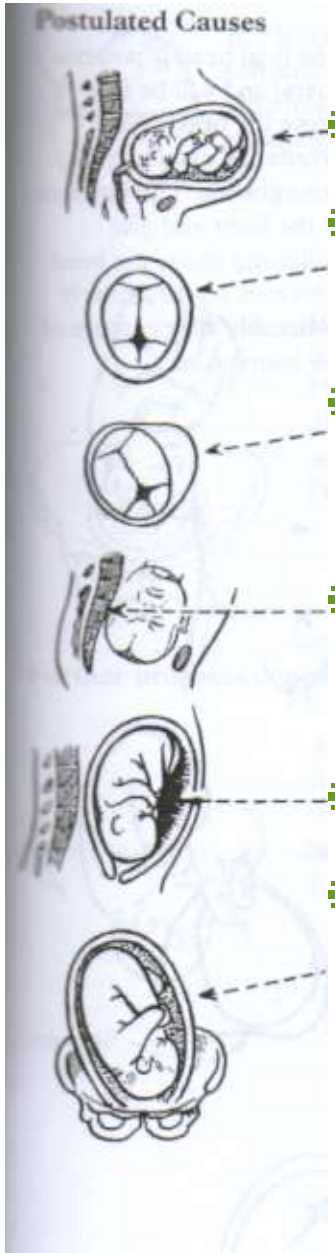
Occiput Transverse

It is the incomplete rotation of OP to OA results in the fetal head being in a horizontal or transverse position (OT).

How to diagnose?

- Palpation
  - Fetal back is found to one side or may be difficult to identified.
  - The fetal head is posterolateral and will be free above the brim.
- Auscultation
  - The fetal heart best heard in the flank but descends to just above the pubis as the head rotates and descends.
- VE
  - the membrane tend to ruptured early before the labour is establish if the membrane is intact they may protrude through the cervix giving finger-like forewaters.

Factors that favour malposition

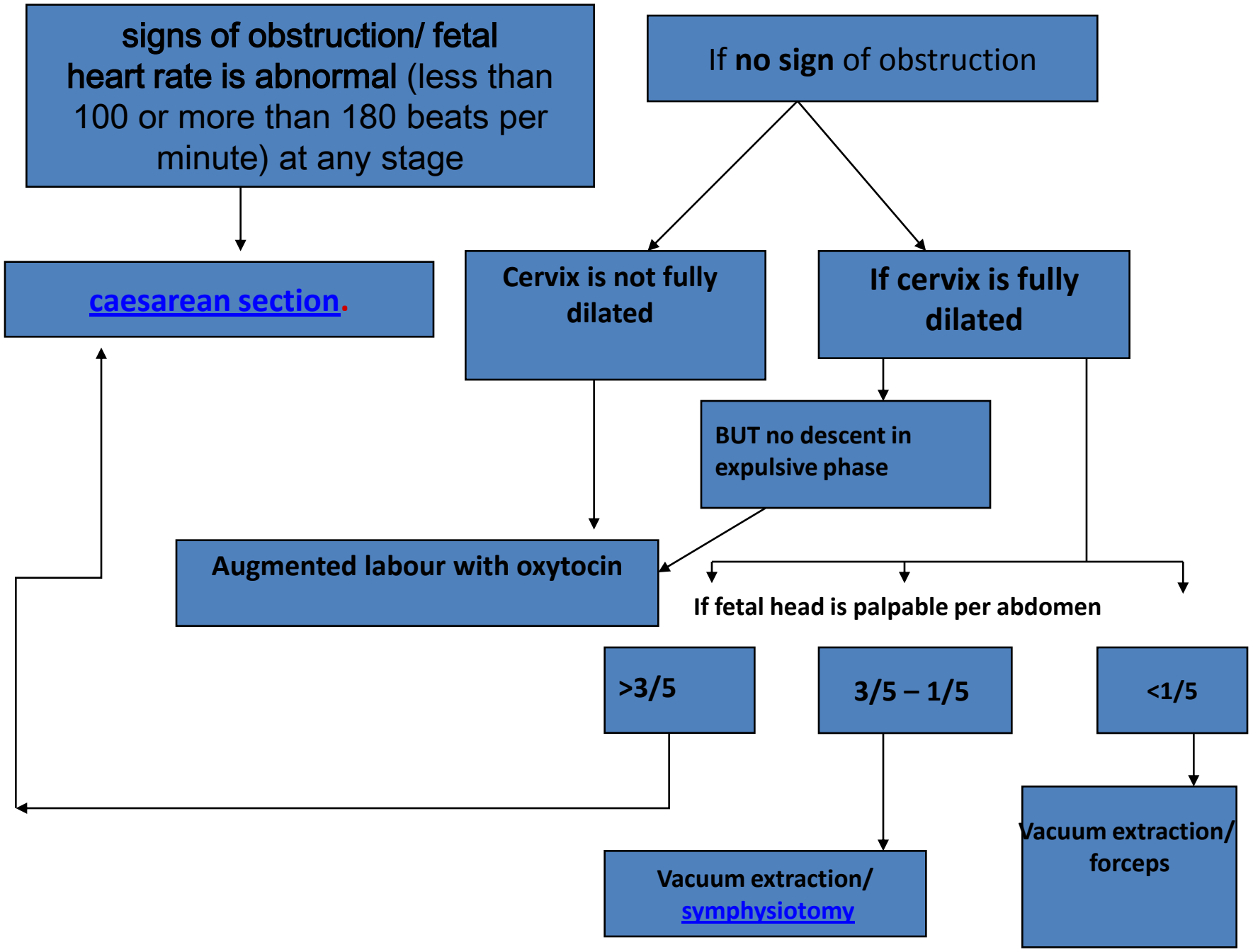


- Pendulous abdomen- in multiparae
- Anthropoid pelvic brim- favours direct O.P/O.A
- Android pelvic brim
- A flat sacrum-transverse position
- The placenta on the ant. uterine wall
- R.O.P

Problems

- **Occiput Posterior** - the baby's head faces the front of the mother's pelvis instead of turning toward the mother's back. The baby would then be delivered with the head facing the ceiling, which is often a more difficult way to deliver. A large episiotomy may be required.This position occurs more often in women who are having their first baby and women who have a narrow midpelvis.
- OP- may lead to dysfunctional labour (in primigravida). Contraction may be painful and accompanied by backache

Management of malposition


signs of obstruction/ fetal heart rate is abnormal (less than 100 or more than 180 beats per minute) at any stage
If no sign of obstruction
caesarean section.
Cervix is not fully dilated
If cervix is fully dilated
BUT no descent in expulsive phase
Augmented labour with oxytocin
If fetal head is palpable per abdomen
>3/5
3/5 – 1/5
<1/5
Vacuum extraction/ symphysiotomy
Vacuum extraction/ forceps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MALPRESENTATION

Types:

- Breech 3 in 100
- Face 1 in 500
- Brow 1 in 2000
- Shoulder 1 in 300
- Compound

Related Factors:

- The woman has had more than one pregnancy
- There is more than one fetus in the uterus
- The uterus has too much or too little amniotic fluid
- The uterus is not normal in shape or has abnormal growths, such as fibroids
- Placenta previa
- The baby is preterm

Breech Presentation

Perinatal mortality up to 4 times compared to vertex presentation.

Breech presentation only becomes significant after 36weeks

Types of Breech Presentation:

- Complete (Flexed) Breech Presentation
- Footling Breech Presentation
- Frank (Extended) Breech Presentation
- Kneeling Breech Presentation

- Predisposing factors:
  - Fetal — Prematurity; Fetal abnormality; Intrauterine death
  - Placental — Placenta praevia; Placental cornual
  - Amniotic fluid — Polyhydramnios
  - Uterine/ pelvic — Bicornuate/ septate; Pelvic masses

Frank Breech (60%)

The baby's bottom comes first, and the legs are flexed at the hip and extended at the knees (with feet near the ears).

65-70% of breech babies are in the frank breech position.

Complete Breech (15%)

The baby's hips and knees are flexed so that the baby is sitting cross legged, with feet beside the bottom.

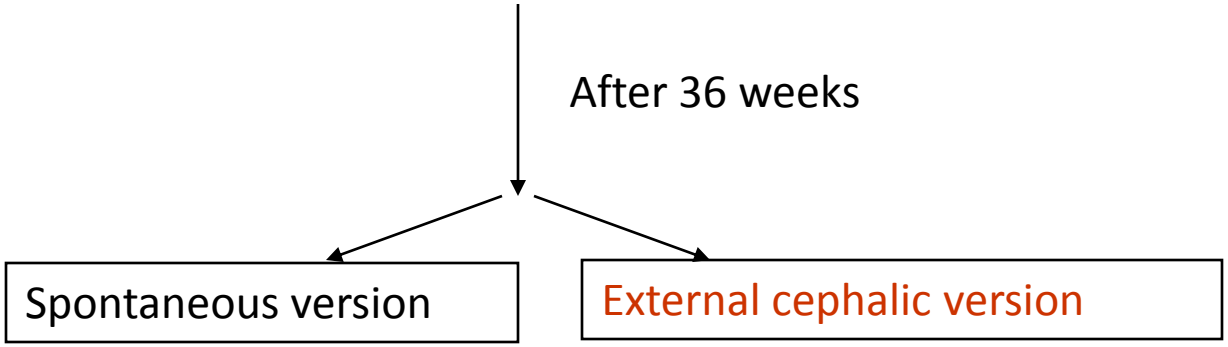
Footling Breech (25%)

One or both feet come first, with the bottom at a higher position. This is rare at term but relatively common with premature fetuses

Kneeling Breech

The baby is in a kneeling position, with one or both legs extended at the hips and flexed at the knees. This is extremely rare.

BREECH PRESENTATION
-- Management



BREECH PRESENTATION
-- External Cephalic Version

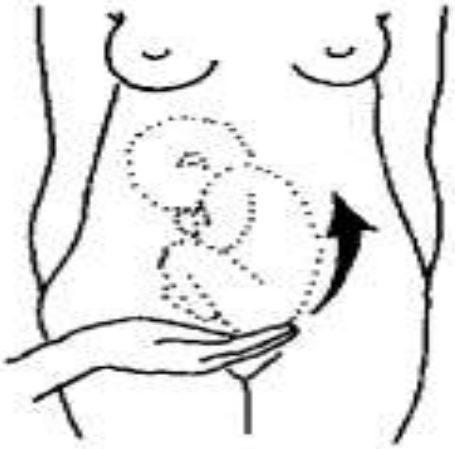
- Attempt external cephalic version if:
  - Breech presentation is present at or after 36 weeks
  - Vaginal delivery is possible;
  - Membranes are intact and amniotic fluid is adequate;
  - There are no complications (e.g. fetal growth restriction, uterine bleeding, previous caesarean delivery, fetal abnormalities, twin pregnancy, hypertension, fetal death).

BREECH PRESENTATION
-- External Cephalic Version

- Risks:
  - Placental abruption
  - Premature rupture of the membranes
  - Cord accident
  - Transplacental haemorrhage
  - Fetal bradycardia

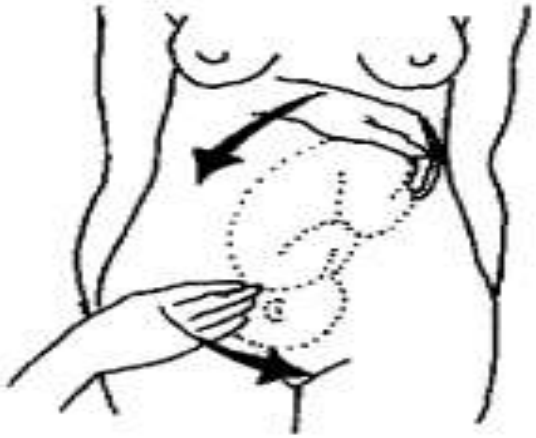
BREECH PRESENTATION
-- External Cephalic Version

- Absolute contraindication:
  - Previous scar on the uterus
  - Placenta praevia
  - Unexplained APH
  - Pre-eclampsia
  - Multiple pregnancy
- Relative contraindications:
  - Rhesus isoimmunisation
  - Elderly primigravida
  - IUGR
  - Oligo/ polyhydramnios

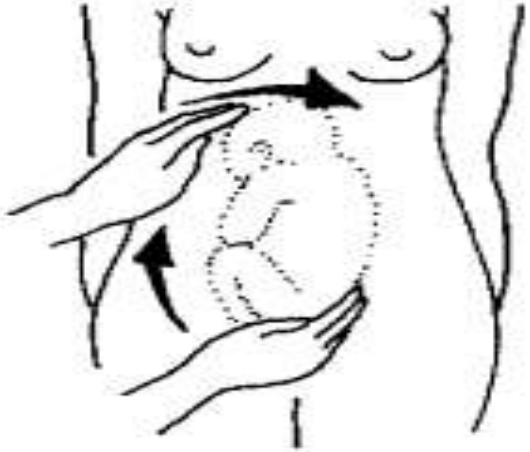


A. Mobilization of the breech

B. Manual forward rotation using both hands, one to push the breech and the other to guide the vertex



C. Completion of forward roll



D. Backward roll

Principle: ‘Masterly inactivity

- The following points are important for the safe conduct
  of a breech delivery:
  • Don’t be in hurry.
  • Never pull from below and let the mother expel the fetus by her own effort with uterine contractions
  • Always keep the fetus with its back anterior
  • Keep a pair of obstetrics forceps ready should it become necessary to assist the aftercoming head
  • Anesthetist and pediatrician should attend the delivery
  • Inform the operation theater, if C/S is needed.

BREECH PRESENTATION
-- Vaginal Breech Delivery

- Await for spontaneous labour
- A vaginal examination is done not only to assess the progress of labour
- If the **membranes rupture**, do a vaginal examination immediately to exclude uterine cord prolapse.
- If the **membranes not rupture**, examine for cord presentation.
- Do not rupture the membranes
- Examine and monitor the woman regularly and adhere strictly to the partogram.
- Poor progress may occur if sacrum is posterior/ bigger baby than expected
- If there is any delay, the fetus is best delivered by an emergency caesarean section.

BREECH PRESENTATION
-- Vaginal Breech Delivery

- Delivery of the buttocks
  - Occur naturally
- Delivery of the legs and lower body
  - Legs flexed : spontaneous delivery
  - Legs extended : 'Pinard's manoeuvre'
- Delivery of the shoulders
  - Loveset's manoeuvre
- Delivery of the head
  - Burns Marshall method
  - Mariceau-Smellie-Veit manoeuvre
  - Forceps delicery of the aftercoming head

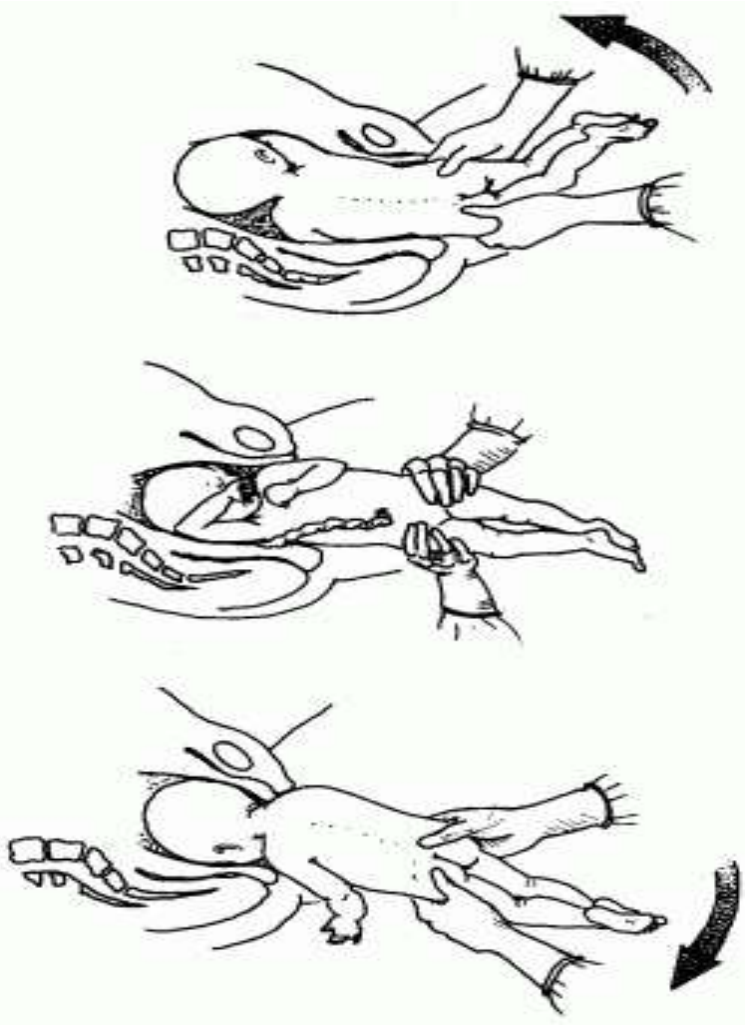
Pinard's manoeuvre

- In breech with extended legs
- once the groin is visible gentle pressure can be applied to abduct the thigh and reach the knee.
- The knee can be flexed with pressure in the popliteal fossa and the leg delivered.
- Anterior leg is always delivered first.

BREECH PRESENTATION
-- Vaginal Breech Delivery

Loveset's manoeuvre

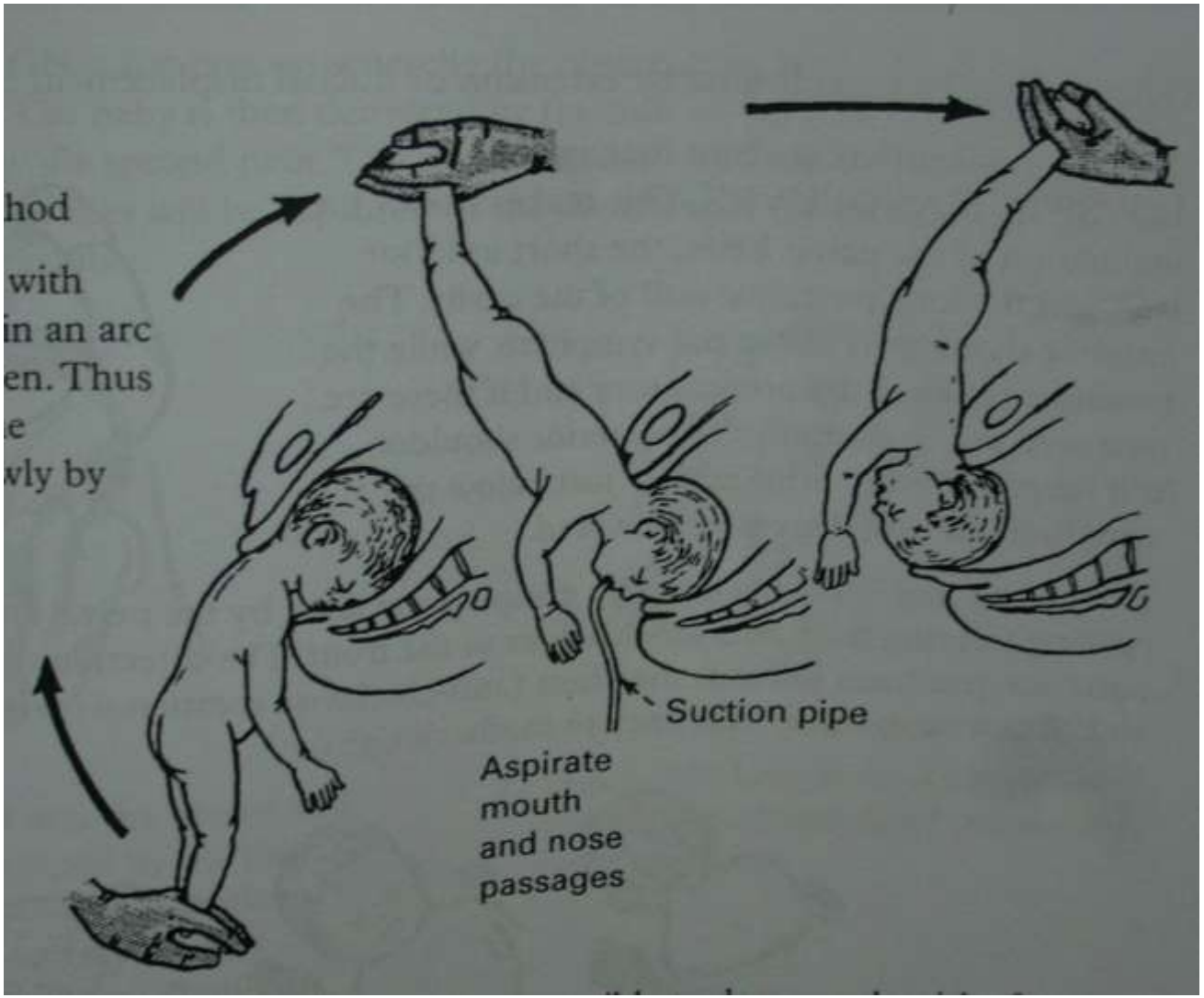
- This procedure automatically corrects any upward displacement of arms.
- In Lovset's maneuver baby's trunk is made to rotate with downward traction holding the baby at the iliac crest so that posterior shoulder comes below symphysis pubis and the arm is delivered by flexing the shoulder followed by hooking at the elbow and flexing it followed by bringing down the forearm 'like a hand shake'.
- The same procedure is repeated by reverse rotation of 180 degree so that anterior shoulder comes below the symphysis pubis.



Burns Marshall method

- For delivery of the aftercoming **head**
- It is commonly practice where the baby is allowed to hang for a minute or so,
- The assistant gives a suprapubic downward and pressure (Kristellar's maneuver) to promote the head.
- Once the nape of the neck is visible, identified by the hairline, the baby's trunk is gently lifted and swung toward mother's abdomen holding the baby just above the ankle through an arc of 180 degree.
- Left hand guards and slips the perineum over fetal mouth.
- As the mouth is born air passage is cleared of mucus and now depressing the trunk the head is allowed to born.

Burns Marshall Method:



Mariceau-Smellie-Veit Manoeuvre

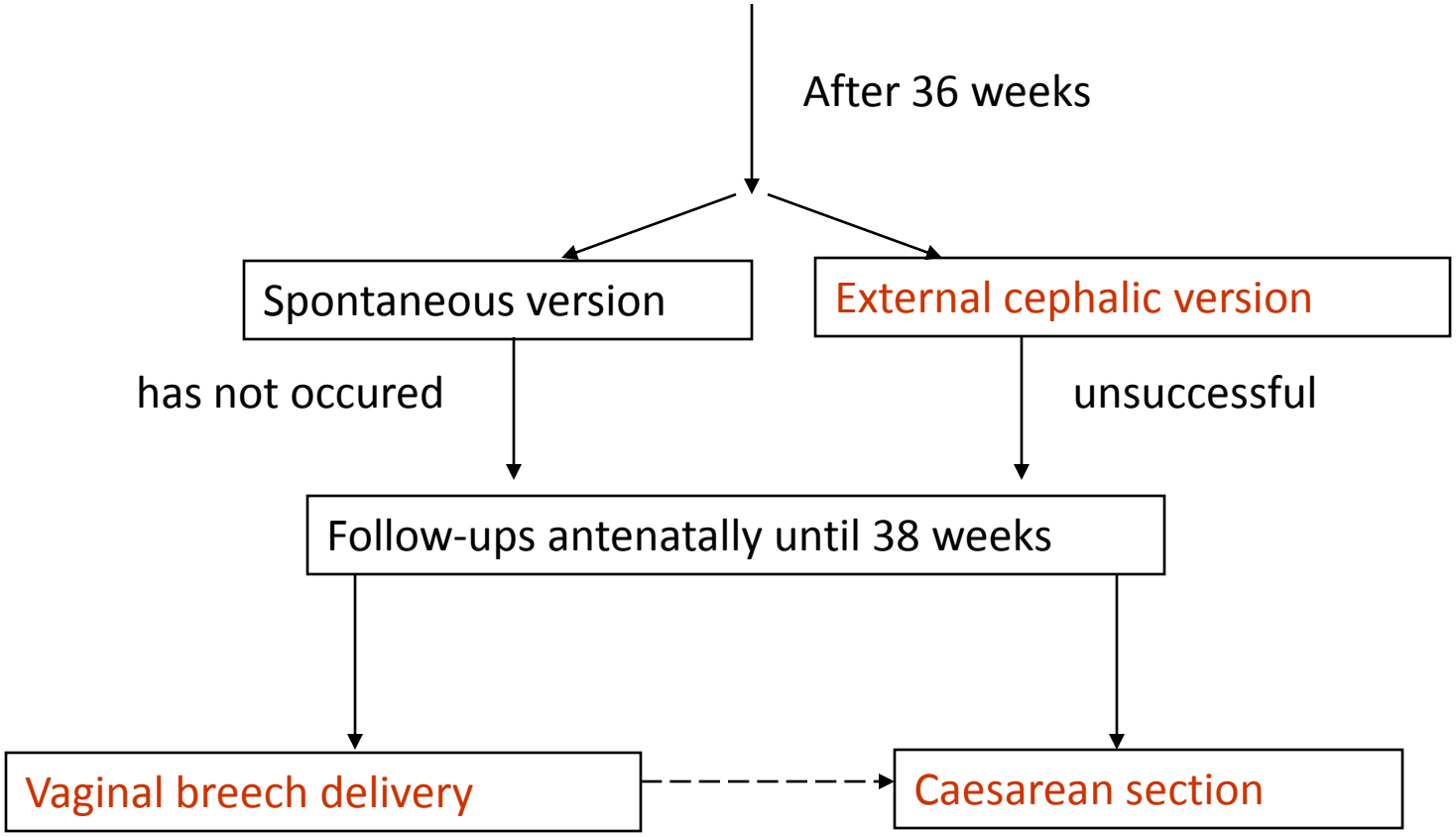
Jaw flexion *and shoulder traction—JFST(*Mariceau-Smellie-Veit Manoeuvre*)*

- Here the baby is allowed to rest on the left supinated forearm of the obstetrition, with the limbs hanging on either side.
- Left index and middle finger is placed on the malar bones, while the right index and ring fingers are placed on the respective shoulders and the middle finger on the sub-occipital region.
- To achieve flexion, traction is now given in downward and backward direction and simultaneous suprapubic pressure is maintained by the assitant until the nape of the neck is visible.
- Thereafter, the baby is pulled in upward and forward direction so that the face is born and by depressing the trunk the **head** is born.

Forceps delicery of the aftercoming head

- The long Das/Simpson's obstetric forceps can be used instead of Piper's forceps.
- The important prerequisite is that head must be in the pelvic cavity and the occiput is directly anterior, i.e. the face is facing the posterior pelvic wall.
- Baby is lifted up by the assistant without deviating the trunk to any side and forceps is applied from ventral side.

BREECH PRESENTATION
-- Management



BREECH PRESENTATION
-- Caesarean Section

- Factors that favour:
  - EBW > 3.5 Kg
  - Small pelvis (anterior posterior inlet or outlet diameter of less than 11cm)
  - Preterm fetus
  - Footling/ flexed breech
  - Hyperextended head
  - Patient with poor obstetric history
  - complications in the present pregnancy such as pre-eclampsia, intrauterine growth restriction, diabetes, cardiac disease, previous caesarean section

BREECH PRESENTATION
-- Caesarean Section

- However in 2000 the result of the Canadian Term Breech Trial were published. It came out overwhelmingly with the conclusion that singleton breech presentations at term should preferably be delivered by caesarean section.
- Not to do so would invite unacceptable fetal morbidity or mortality.
- There is therefore now a trend to deliver all breeches at term by caesarean section.

- be remembered however, the results of the study do not apply to

1) twin pregnancy with breech presentations,
2) preterm breech deliveries
3) breech presentations that arrive late
4) in advanced labour.

- In those situations there still appears to be a role for delivering the baby vaginally.

Face Presentation

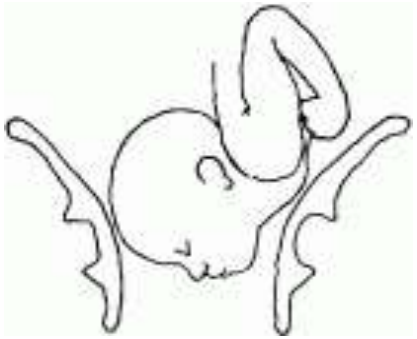
- head is hyper extended
- presenting part is face
- denominator is chin (mentum)
- between glabella & chin
- presenting diameter is submentobregmatic (9.5cm)

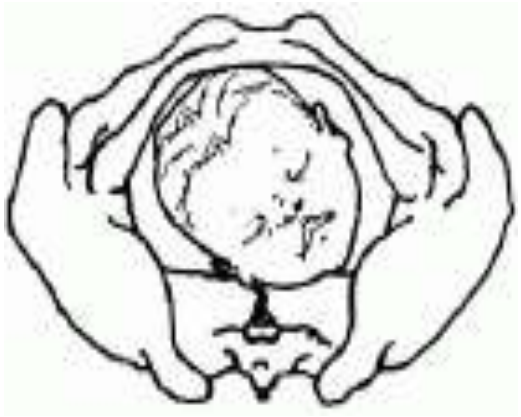
- AETIOLOGY

Maternal	Fetal
• Multiparity • Lateral obliquity of fetus • Contracted pelvis / CPD • Flat pelvis	• Congenital Malformation (anencephaly) • Several coils of umbilical cord around the neck • Musculoskeletal abnormality (spasm/ shortening of extensor muscle of neck) • Tumors around neck (congenital goiter)

FACE PRESENTATION
-- Diagnosis

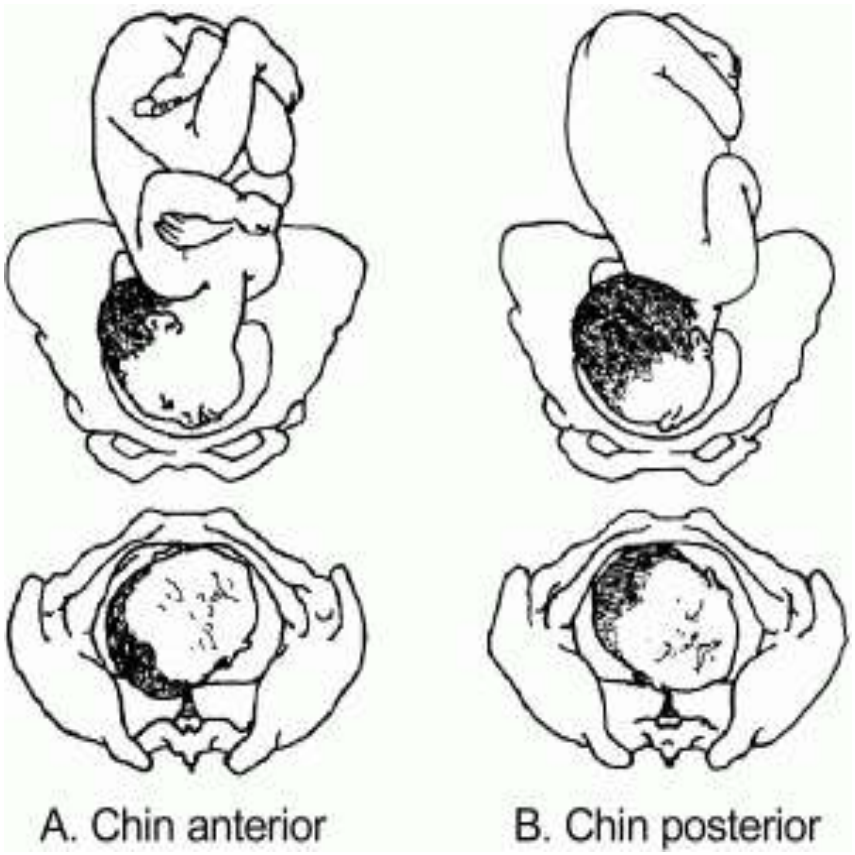
- Is caused by hyperextension of the fetal head so that neither the occiput nor the sinciput are palpable on vaginal examination.
- On abdominal examination, a groove may be felt between the occiput and the back.
- On vaginal examination, the face is palpated, the examiner's finger enters the mouth easily and the bony jaws are felt.





FACE PRESENTATION
-- Diagnosis

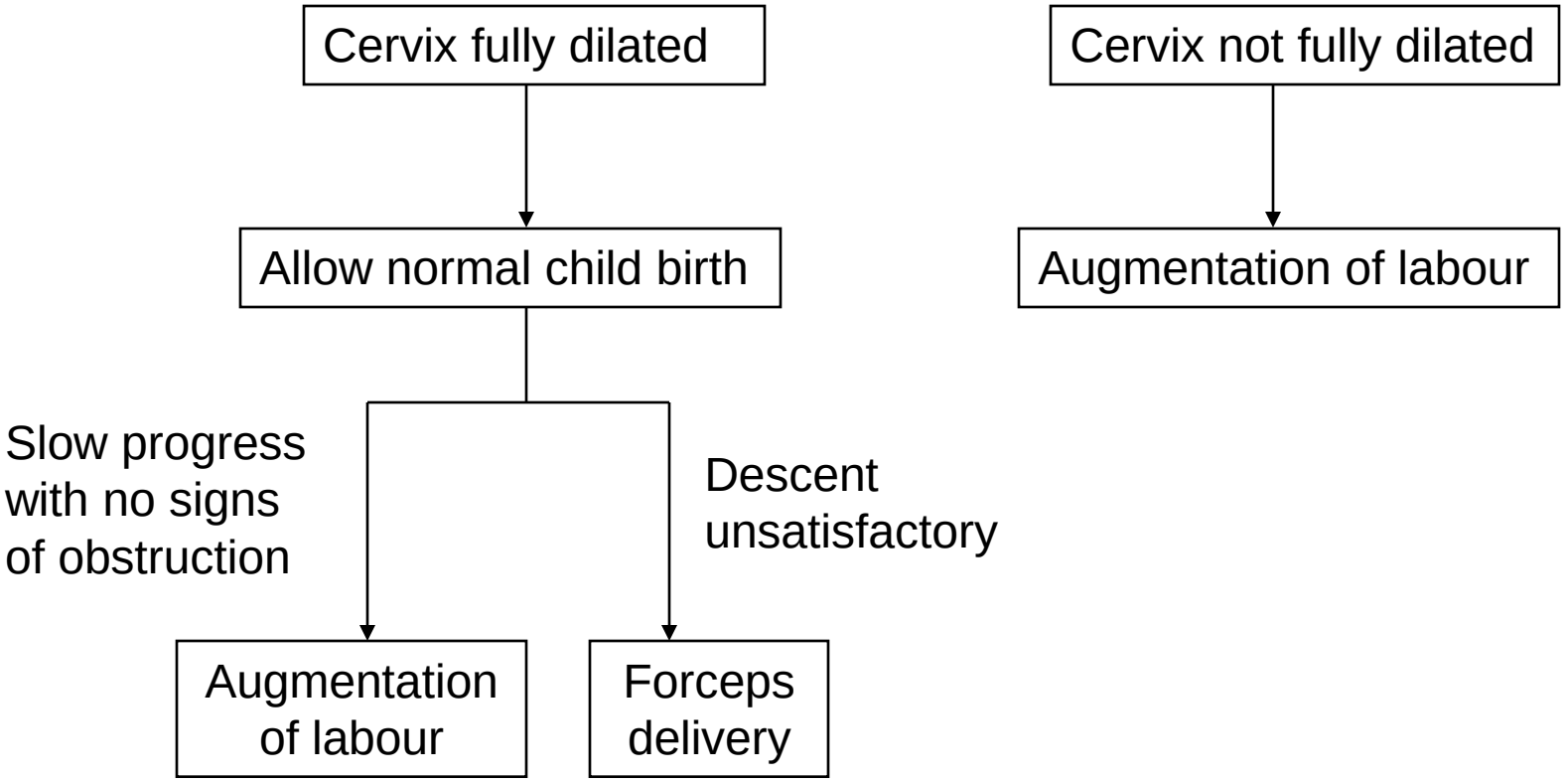
- The chin serves as the reference point in describing the position of the head.
- It is necessary to distinguish only chin-anterior positions in which the chin is anterior in relation to the maternal pelvis from chin-posterior positions.



FACE PRESENTATION
-- Management

- Prolonged labour is common.
- Descent and delivery of the head by flexion may occur in the chin-anterior position.
- In the chin-posterior position, however, the fully extended head is blocked by the sacrum. This prevents descent and labour is arrested→ **caesarean section**

FACE PRESENTATION
-- Management of Chin-anterior

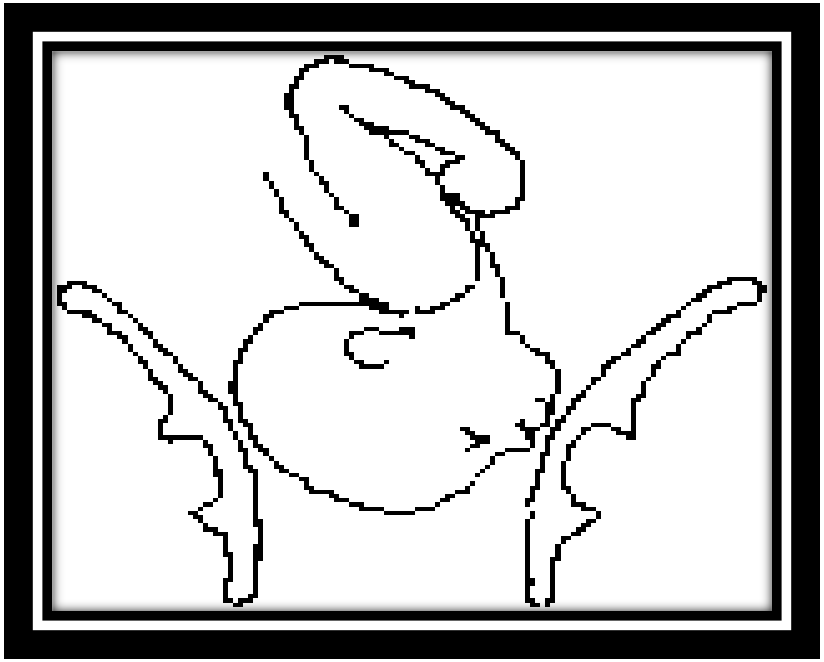


Brow Presentation

- The brow presentation is caused by partial extension of the fetal head so that the occiput is higher than the sinciput.

- MGT: If the fetus is alive or dead, deliver by caesarean section.

**Do NOT deliver brow presentation by vacuum extraction, outlet forceps or symphysiotomy.*

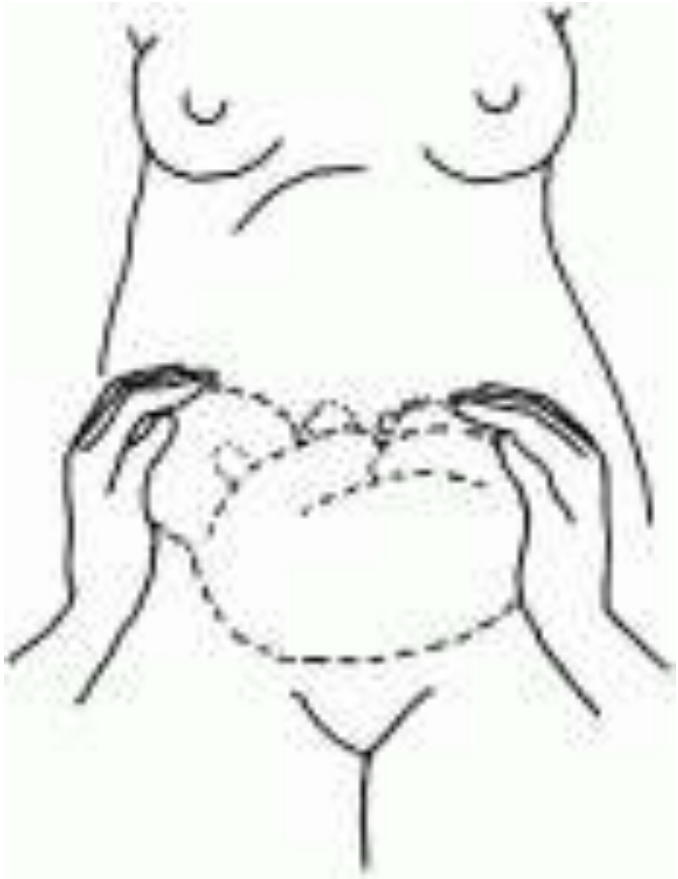


Mentovertical D = 14cm

Attitude = Partial Extension

Shoulder Presentation

- Occurs as a result of transverse lie or oblique lie
- Predisposing factors = breech presentation
- On **abdominal examination**, neither the head nor the buttocks can be felt at the symphysis pubis and the head is usually felt in the flank.
- On **vaginal examination**, a shoulder may be felt, but not always. An arm may prolapse and the elbow, arm or hand may be felt in the vagina.
- Ultrasound examination



Management

- Monitor for signs of cord prolapse. If the cord prolapses and delivery is not imminent, deliver by caesarean section.
- In modern practice, persistent transverse lie in labour is delivered by caesarean section whether the fetus is alive or dead.

Compound Presentation

- Occurs when an arm prolapses alongside the presenting part. Both the prolapsed arm and the fetal head present in the pelvis simultaneously.

Management

- Replacement of the prolapsed arm
    - Assist the woman to assume the knee-chest position
    - Push the arm above the pelvic brim and hold it there until a contraction pushes the head into the pelvis.
    - Proceed with management for normal childbirth
- If the procedure fails or if the cord prolapses, deliver by caesarean section

SUMMARY

Presentation	Management
Breech	Vaginal delivery ± ECV/ Caesarean section
Face	Vaginal delivery (chin-anterior)/ Caesarean section (chin-posterior)
Brow	Caesarean section
Shoulder	Caesarean section
Compound	Replacement of prolapsed arm → Vaginal delivery/ Caesarean section


THANK
YOU