trics books, visit our website www.jaypeebrothers.com, for detailed information on obstetrics books, visit our website www.jaypeebrothers.com, for detailed information on obstetrics books

Based on Latest Guidelines and Updates

Includes INI-CET & NEET PG 2024 Questions

diginerve®
A Jaypee Initiative
• Video Lectures • Dr. Wise AI Chatbot
• Question Bank • Notes
Download App

Sakshi Arora's

Self Assessment & Review

OBSTETRICS

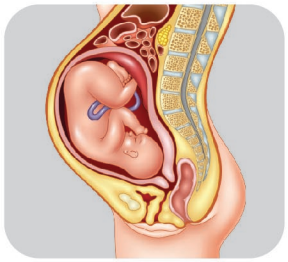
A must-buy books for INI-CET and NEET PG exams

Thoroughly Revised & Updated from Williams's Obstetrics, 26/e, DC Dutta's Textbook of Obstetrics, 10/e

Special Features

- All Recent Questions covered
- INI-CET Nov/May 2024 included
- NEET-PG Questions & explanations included
- Chapter synopsis updated from Williams's Obstetrics 26th edition
- New Pattern Questions and image-based Questions included
- Includes Annexures for last-minute revision







Gold Standard Book for Indian & Foreign Medical UGs

14th Edition

Revised by

Roshini P

JAYPEE

Contents

Important Topic: SLE in Pregnancy xvii
Annexures xix
AIIMS New Pattern Questions with Answers xxv

SECTION 1: General Obstetrics

1. Basics of Reproduction ✦✦✦✦ 3
2. Placenta, Fetal Membranes and Umbilical Cord ✦✦✦✦ 16
3. Amniotic Fluid and its Abnormalities ✦✦✦✦ 34
4. Fetal Physiology ✦✦✦ 44
5. Maternal Adaptations in Pregnancy ✦✦✦✦✦ 51
6. Diagnosis in Obstetrics and Fetal Monitoring ✦✦✦✦✦ 81

SECTION 2: Labor

7. Pelvis and Fetal Skull ✦✦✦✦ 133
8. Fetus in Utero 150
9. Normal and Abnormal Labor ✦✦✦✦✦ 158
10. Third Stage of Labor and its Complications ✦✦✦✦✦ 193
11. Malpresentations ✦✦✦✦✦ 218
12. Obstructed Labor and Intrauterine Death (IUD) ✦✦✦✦ 243
13. Operative Obstetrics ✦✦✦✦✦ 255
14. Preterm Labor, Premature Rupture of Membranes and Post-dated Pregnancy ✦✦✦✦ 277

SECTION 3: Complications Specific to Pregnancy

15. Abortion and MTP ✦✦✦✦ 301
16. Ectopic Pregnancy ✦✦✦✦ 326
17. Trophoblastic Diseases including Choriocarcinoma ✦✦✦✦ 349
18. Antepartum Hemorrhage (APH) and DIC ✦✦✦✦✦ 367
19. Multifetal Pregnancy ✦✦✦✦✦ 390
20. Pregnancy in Rh-Negative Women ✦✦✦✦ 408

SECTION 4: Medical Complications in Pregnancy

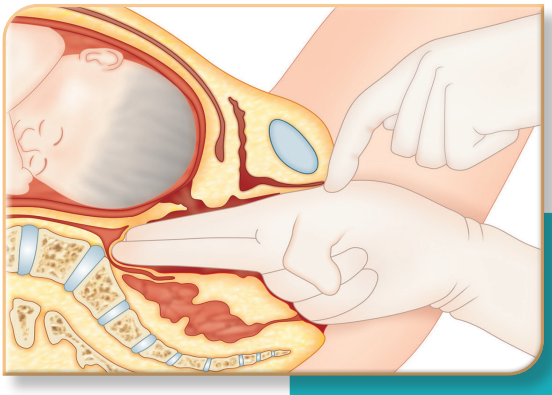
21. Anemia in Pregnancy ✦✦✦ 431
22. Heart Disease in Pregnancy ✦✦✦ 445
23. Diabetes and Thyroid in Pregnancy ✦✦✦✦✦ 460

24. Hypertensive Disorders in Pregnancy✦✦✦✦✦ 487
25. Infections in Pregnancy✦✦✦ 509
26. Other Problems in Pregnancy✦✦✦ 537
27. Puerperium and its Abnormalities✦✦✦ 578
28. Fetal Growth Disorders✦✦✦ 593

SECTION 5: Most Recent Papers

1. NEET 2024 615
2. NEET 2023 624
3. NEET 2022 627
4. NEET 2021 633
5. INI-CET 2024 636
6. INI-CET November 2023 640
7. INI-CET May 2023 643
8. INI-CET November 2022 645
9. INI-CET May 2022 652
10. INI-CET November 2021 658
11. INI-CET May 2021 661

Most Important ✦✦✦✦✦
Very Important ✦✦✦✦
Important ✦✦✦



Chapter
11

Malpresentations

Chapter at a Glance

- Malpositions
- Occipito-posterior Position
- Malpresentations
- Face Presentation
- Brow Presentation
- Breech Presentation
- Transverse Lie
- Unstable Lie
- Cord Prolapse

MALPOSITIONS

- **Malposition** refers to any position of the vertex other than flexed occipito-anterior or occipito transverse.
- **M/C malposition is occipito-posterior position**.

OCCIPITO-POSTERIOR POSITION

- In a vertex presentation where the occiput is placed posteriorly over the sacroiliac joint or directly over the sacrum, it is called an occipito-posterior position.
- When the occiput is placed over the right sacroiliac joint, the position is called **right occipito-posterior (ROP)** and when placed over the left sacroiliac joint, is called **left occipito-posterior** (LOP) and when it points towards the sacrum, is called **direct occipito-posterior**.
- **M/C being Right occipito-posterior position as Dextro-rotation of the uterus and the presence of the sigmoid colon on the left, disfavor LOP position.**
- All the three positions may be primary (present before the onset of labor) or secondary (developing after labor starts.

Incidence

- At the onset of labor—10%
- During late stages of labor—only 2% as occipito-posterior positions rotate in 80–90% cases and become occipito anterior.

Etiology

- Mostly idiopathic.
- M/C cause of OP position—Anthropoid and android pelvis.
- It is M/C in nulliparous females (where as all the rest malpresentations are more common in multiparous females).
- Marked deflection of the fetal head, also favors posterior position of the vertex. The causes of deflexion are: (1) High pelvic inclination. (2) Attachment of the placenta on the anterior wall of the uterus (3) Primary brachycephaly.

Diagnosis

- There is delay in engagement of head-infact Occipito-posterior position is the M/c cause of non engagement of head at term in primigravida patients.
- Since the occipito-posterior position is due to deflexed head—the sinciput and occiput are at the same level.
- On P/V examination:
  - Elongated bag of membranes which is likely to rupture during examination.
  - The sagittal suture occupies any of the oblique diameters of the pelvis.
  - Posterior fontanelle is felt near the sacroiliac joint.
  - In right OP— the anterior fontanelle will be present on left anterior side and in left OP, the anterior fontanelle will be present on right anterior side.
  - In late labor, the diagnosis is often difficult because of caput formation which obliterates the sutures and fontanelles. In such cases, the ear is to be located and the unfolded pinna points towards the occiput.

JAYPEE BROTHERS

Mechanism of Labor: In Favorable Circumstances

Engaging Diameter: In Deflexed Head-Occipitofrontal Diameter-11.5 cm

- In 90% cases normal delivery occurs as head moves through 3/8th of circle (Fig. 11.1).

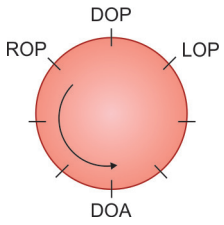


Fig. 11.1: Favorable rotation

So, when diagnosis of occipito-posterior presentation is made—labor is allowed to proceed in a manner similar to normal labor, in anticipation of normal vaginal delivery.

Hence the best management of occipito-posterior position when it is diagnosed during labor is—Wait and watch.

In Unfavorable Circumstances

Incomplete Forward Rotation (Fig. 11.2)

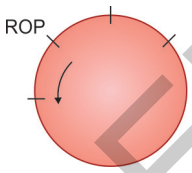


Fig. 11.2: Incomplete forward rotation

In this condition, the occiput rotates through 1/8th of a circle anteriorly and the sagittal suture comes to lie in the bispinous diameter. Thereafter, further anterior rotation is unlikely and arrest in this position is called **deep transverse arrest**.

Deep transverse arrest is defined as the head is deep into the cavity; the sagittal suture is placed in the transverse bispinous diameter and there is no progress in descent of the head even after 1/2–1 hour following full dilatation of the cervix.

Important One Liners

- Deep transverse arrest occurs at the level of ischial spine.
- Deep transverse arrest is more common in pelvis in which ischial spines are prominent, i.e. in Android pelvis.

Management of Deep Transverse Arrest

1. Cesarean section—this is the management of choice, if DTA occurs in android pelvis.
2. Ventouse—can rotate the head of the baby, hence it can be used in the management of DTA, if it occurs in any pelvis other than android pelvis (as android pelvis has sharp and pointed ischial spine).
3. Manual rotation and application of forceps—forceps per se cannot rotate fetal head, but if manual rotation of the fetal head is done, then delivery can be done by forceps.
4. Forceps rotation and delivery with Kielland—**the only forceps which can rotate the fetal head is Kielland forceps but it is outdated these days**.

Note: Operative vaginal delivery for DTA should only be performed by a skilled obstetrician. Otherwise cesarean delivery is always preferred for all kinds of arrest.

Oblique Posterior Arrest

- It is due to Non-rotation of fetal head and is also called as **persistent occipito-posterior position**
- **M/C in anthropoid pelvis** (as in this pelvis, transverse diameter of the pelvis is narrow, so fetal head does not rotate at all)

Malrotation

- In extreme cases there will be malrotation—instead of turning forward fetus turns backward and comes to lie in **direct occipito-posterior position** (Fig. 11.3).
- **It is M/C in anthropoid pelvis** (as AP diameter of this pelvis is the biggest diameter)

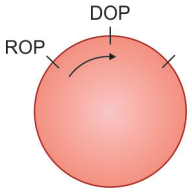


Fig. 11.3: Malrotation

- In case of anthropoid pelvis, **Face to pubis delivery occurs (as AP diameter is the largest diameter)**
- Final delivery in this case is still by extension
- Perineal tears and moulding more common
- In unfavorable circumstances, i.e. in all other types of pelvis, if malrotation occurs, arrest occurs called as **deep sacral arrest**
- **Management of deep sacral arrest** is cesarean section.

JAYPEE BROTHERS

MALPRESENTATIONS

All presentations of the fetus other than the vertex are called as malpresentations.

- **M/C malpresentation is Breech**.

FACE PRESENTATION

- The presenting part is the face
- **There is abnormal attitude in face presentation,** i.e. normally there is flexion of fetal head but in face presentation, there is extension
- The denominator is mentum
- **The commonest position is left mento-anterior (LMA)**
- M/C seen in multiparous females
- M/C pelvis—in which it is seen—platypelloid pelvis
- M/C cause—anencephaly
- Incidence—1 in 500 to 1 in 2,000 deliveries.
- **In mento-anterior (seen in 60–80% cases)**—vaginal delivery is possible. It can be detected during labor by chin facing anteriorly.
  - The engaging diameter of the head is **submento-bregmatic (9.5 cm)** in fully extended head or **submentovertical** (11.5 cm) in partially extended head
  - Engagement is delayed
  - The head is born by flexion instead of extension.
- **In mentoposterior (seen in 20–25% cases)**—if it is detected in early labor, best management is to wait and watch because in 20-30% cases mentoposterior become mentoanterior and delivery occurs but if it is detected in late labor then cesarean section has to be done.

BROW PRESENTATION

- It is the rarest presentation, it is seen in partial extension of head
- Causes of brow presentation are same as for face presentation, i.e. multiparity, platypelloid pelvis and anencephaly or fetal macrosomia
- Engaging diameter—Mentovertical (14 cm)
- There is no mechanism of labor
- Diagnosed on P/V by palpating supraorbital ridges and anterior fontanelle
- Delivery is by cesarean section.

BREECH PRESENTATION

- In breech presentation, the lie is longitudinal and the podalic pole presents at the pelvic brim
- It is the commonest malpresentation
- Incidence: The incidence is about 20% at 28th week and drops to 5% at 34th week and to 3–4% at term. Thus in 3 out of 4, spontaneous correction into vertex presentation occurs by 34th week.

Causes of Breech

Causes of Breech Presentation

Most common cause-prematurity.

Other Causes: ***Factors preventing spontaneous version:***

- Breech with extended legs
- Twins
- Oligohydramnios
- Congenital malformation of uterus like septate on bicornuate uterus
- Short cord
- IUD of fetus

Favorable adaptation:

- Hydrocephalus
- Placenta previa
- Cornual-fundal attachment of the placenta[Q]
- Contracted pelvis

Undue mobility of the fetus:

- Hydramnios[Q]
- Multipara[Q] with lax abdominal wall



Also Know:

Recurrent breech: When breech recurs in 3 or more consecutive pregnancies, it is called haibitual or recurrent breech

Causes:

- Congenital malformation of uterus (septate or bicornuate)
- Repeated cornual-fundal attachment of the placenta.

JAYPEE BROTHERS

Varieties of Breech

1. **Complete breech/flexed breech:** The normal attitude of full flexion is maintained. The thighs are flexed at the hips and the legs at the knees. The presenting part consists of two buttocks, external genitalia and two feet. It is commonly present in multipara. Overall incidence is 10%. Chances of cord prolapse-6%.
2. **Breech with extended legs (Frank breech):** In this condition, the thighs are flexed on the trunk and the legs are extended at the knee joints. The presenting part consists of the two buttocks and external genitalia only. It is commonly present in primigravida. Overall incidence is about 70%. Chances of cord prolapse are least (0.5%). The increased prevalence in primigravida is due to tight abdominal wall.
3. **Knee presentation (rare):** Thighs are extended but the knees are flexed, bringing the knees down to present at the brim. Chances of cord prolapse are more in this case, hence in knee presentation cesarean section is preferred.
4. **Footling presentation:** Both the thighs and the legs are partially extended so the feet become the presenting part. Chances of cord prolapse are maximum 12%. In this condition cesarean section has to be done.

Chances of cord prolapse are Maximum in Transverse lie > Footling > Knee prentation breech > Frank > Flexed > Frank breech.

Note: In case of breech normally the fetal head is flexed, but if head of the fetus is extended, it is called as **Stargazer breech**. Stargazer breech is an indication for doing cesarean section.

Management of Breech

It depends on whether the patient is presenting in antenatal period at ≥ 37 weeks of pregnancy or she is presenting in labor:

If patient presents with breech at >37 weeks external cephalic version can be tried.

External Cephalic Version

- OPD procedure
- No anesthesia needed but recent evidences support use of tocolytics (Terbutaline/Pethidine)—ACOG
- Should be done under continuous fetal monitoring
- Here the breech/transverse lie is tried to rotate per abdominally so that it converts to cephalic

Prerequisite:
- Period of gestation ≥ 37 weeks (Williams Obs 25th/ed pg 549)
- Liquor should be adequate
- Membranes should be intact
- There should be no contraindication for vaginal delivery.
- Facility of emergency cesarean section (ACOG 2016a)

Contraindication of ECV

Absolute contraindication

- Placenta previa
- Multifetal pregnancy
- Whenever vaginal delivery is C/I like contracted pelvis

Relative contraindication

- Early labor
- Oligohydramnios
- Rupture of membranes
- Known case of nuchal cord
- Structural uterine abnormalities
- Fetal growth restriction
- Prior assumption on its risks
  Previous cesarean section

Complications of ECV

- Fetal compromise
- Placental abruption

Chances of emergency cesarean section with ECV = 0.5%

If patient comes in late labor or if external cephalic version is unsuccessful/contraindicated:
In this case there are 3 options:
1. Assisted breech delivery
2. Breech extraction
3. Cesarean section

1. Assisted Breech Delivery

- Vaginal delivery can be done in breech only if Zatuchni-Andros score is > 4.
- If it is < 4, then cesarean delivery is indicated.
- In assisted breech delivery, vaginal delivery of breech is allowed to progress and at whichever stage, breech gets stuck, the obstetrician performs some maneuver to deliver that part.

JAYPEE BROTHERS

Mechanism of Labor in Breech

- Lie-longitudinal
- Presentation-podalic
- Denominator-sacrum
- M/C position-left sacroanterior.

General Principles in Breech Delivery

- Labor should be carried out in specialized units
- Induction of labor is best avoided
- In prolonged second stage, it is not advisable to rupture membranes due to the risk of cord prolapse and not by oxytocin also because strong contractions produced by oxytocin can cause descent of soft breech even if there is fetopelvic disproportion, with resultant difficulties in delivery of head
- Delay in first or second stage is regarded as a sign of feto-pelvic disproportion and requires cesarean section.

Delivery of Breech Occurs at 3 Levels

1. **Delivery of Buttocks**: The diameter of engagement of the **buttock is one of the oblique diameters of the inlet**. The engaging diameter is bitrochanteric (10 cm).

- Always give episiotomy in breech.
- The best time for episiotomy is when the perineum is distendedand thinned by the breech as it is 'climbing' the perineum.
- If buttocks do not deliver spontaneously-the maneuver used by obstetricians are:
  - **Groin traction (Fig. 11.4)**
  - **Pinard maneuver (Figs. 11.5A to C)**—used for delivery of extended legs. In Pinard maneuver, the middle and the index fingers are carried up to the popliteal fossa (Remember P for pinard, P for popliteal fossa). It is then pressed and abducted so that the fetal leg is flexed. The fetal foot is then grasped at the ankle and leg delivered.

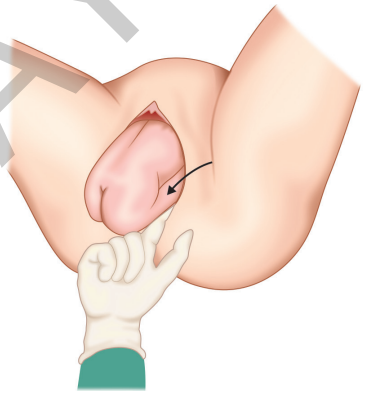


Fig. 11.4: Delivery of the extended leg by abduction at the knee

- Soon after the trunk up to the umbilicus is born
- The umbilical cord is now to be pulled down and mobilized to one side of the sacral bay to minimize compression

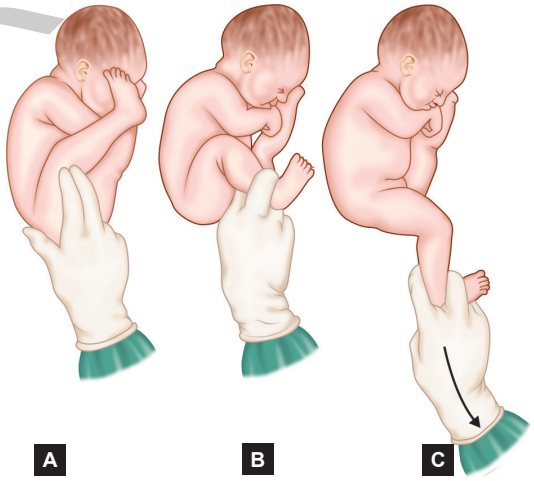
- To prevent cord from shrivelling—Wrap the baby in warm towel after delivery of body and before delivery of head-this is called as **Savage technique**.

2. **Delivery of Shoulders:**

- The engaging diameter is bisacromial diameter (12 cm).
- **Shoulder engages in the same oblique diameter as that occupied by the buttocks** at the brim soon after the delivery of the breech
- If the shoulders do not deliver spontaneously because of the extended arms or nuchal displacement of arms **Lovset maneuver** is done where using femoro-pelvic grip, the trunk of the baby is rotated so that shoulders occupy anteroposterior diameter of the pelvis **(Figs. 11.6A to C)**.

3. **Delivery of after-coming head of breech:**

- **Engagement occurs through the opposite oblique diameter as that occupied by the buttocks**

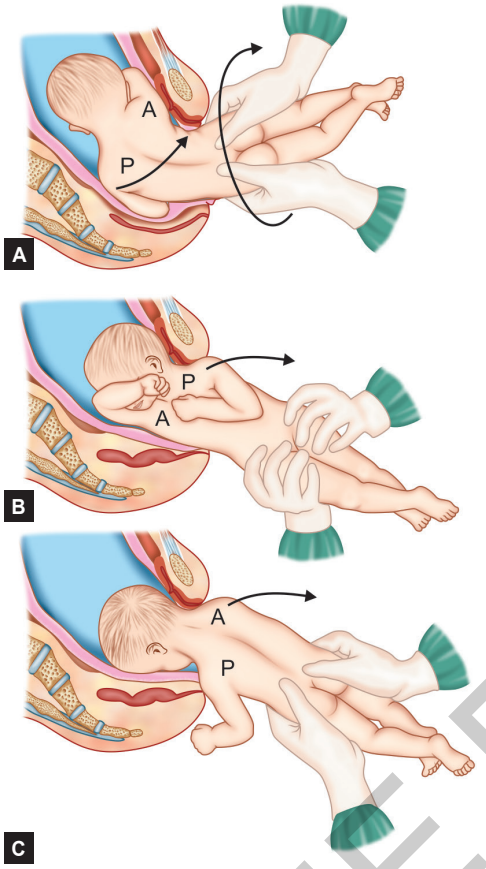


Figs. 11.5A to C: Pinard's maneuver—(A) Flexion and abduction of popliteal fossa; (B) To catch, hold the ankle; (C) To pull down by movement of abduction

- The engaging diameter of the head is suboccipitofrontal (10 cm)
- This is the most important stage of delivery. Not more than 10 minutes (preferably) should elapse between delivery of umbilicus and head to reduce the chances of fetal sphyxia
- **Maneuvers used for delivery of after-coming head are**
  - **Burns-Marshall technique—**Let baby hang by its weight. The assistant gives suprapubic pressure with every contaction in downward and backward direction

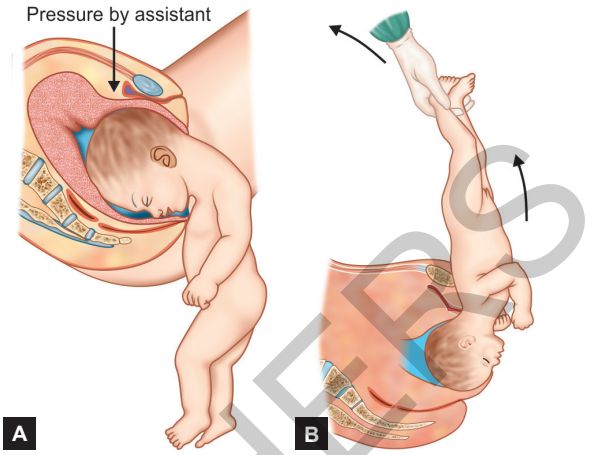
JAYPEE BROTHERS

(kristeller maneuver) and then the obstetrician takes the feet towards mother's abdomen. It is the most commonly used method (Figs. 11.7A and B).

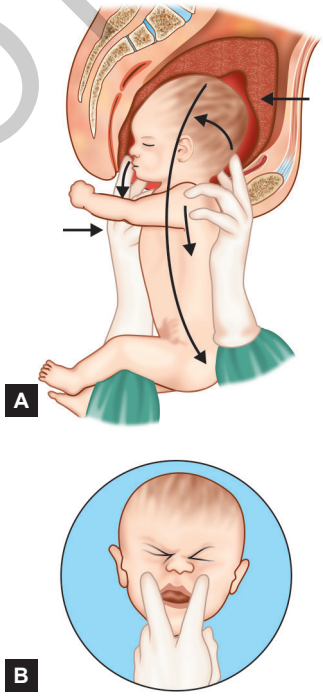


Figs. 11.6A to C: Lovset's maneuver

- **Bracht maneuver**—Do not let the baby hang by its weight, rest same as Burn-Marshall method
- **Malar flexion and shoulder traction—Mauriceau-Smellie-veit technique (Figs. 11.8A and B)**—The baby is placed on the supinated left forearm (preferred) with the limbs hanging on either sides. The middle and index fingers of the left hand are placed over the malar bones on either sides (modification of the original method where the index finger was introduced inside the mouth). This maintains flexion of the head. The ring and little fingers of the pronated right hand are placed on the child's right shoulder, the index finger is placed on the left shoulder and the middle finger is placed on the suboccipital region. Traction is now given in downward and backward direction till the nape of the neck is visible under the pubic arch. The assistant gives suprapubic pressure during the period to maintain flexion.



Figs. 11.7A and B: (A) Delivery of after-coming head by Burns-Marshall method; (B) Continuation of the Burns-Marshall method



Figs. 11.8A and B: Delivery of the after-coming head by malar flexion and shoulder traction—(A) Original Mauriceau-Smellie-Veit; (B) Modification (preferred)

- **Wigand-Martin technique**—Here one finger in baby mouth and 2 on cheeks and no shoulder traction is given just suprapubic pressure is used.

- **Forceps**: Any ordinary mid cavity forceps like **Das forceps** or **Neville Barney Forceps** can be used for delivery of after-coming head of breech. There are specially designed forceps—**Pipers forceps** (with absent pelvic curve) for this purpose, but usually they are not available in India.

JAYPEE BROTHERS

Also Know:

Sometimes in breech presentation, the after-coming head rotates posteriorly. So that the face is behind the pubis, this condition is difficult to deliver and is called Chin to pubis rotation. **Prague maneuver** is used for delivery of occipito-posterior of head in breech.

2. *Breech Extraction*

- When part or the entire body of the fetus is extracted by the obstetrician under general anesthesia without any effort by the patient it is called breech extraction.
- It is rarely done these days as it produces trauma to the fetus and the mother.
- Its only indication is delivery of the second twin if it is transverse lie and internal podalic version is successful.

3. *Cesarean Section*

The rates of term breech vaginal delivery are decreasing as more and more studies are showing that planned cesarean delivery is associated with lower risk of perinatal mortality compared to planed vaginal delivery. As it is in preterm breech we prefer cesaran. So overall cesarean is being done for Breech

Factors Favouring Elective Cesarean in Breech

- Footling/knee presentation
- Stargazer breech
- Preterm breech (here external cephalic version is avoided. Cesarean delivery is usually performed when fetal weight is <2500 gm)
- The SOGC committee states that vaginal breech delivery is reasonable if weight of fetus > 2500g
- Breech with baby weight more than 3.8 to 4 kg
- Twin with first breech
- Breech with previous cesarean
- Breech with any other complication of pregnancy—Placenta previa, PIH
- Breech score 3 or less

- Breech with postmaturity >40 weeks as induction of labor is best avoided.
- Primi with breech-**relative indication**.

Indications for emergency cesarean section

- Prolonged first or second stage of labor
- Cord prolapse
- Fetal distress
- If footling or knee presentation are detected during labor

Complications of Breech

Maternal	Fetal
• Genital tract laceration • Extension of episiotomy • Perineal tear	• Prematurity • Increased risk of congenital anomalies • Umbilical cord prolapse • Birth tranova including fracture of clavicle, humerus and femur • Brachial plexus injury • Hematoma of sternocleidomastoid • Genital injury • Some complications are inherent to breech position rather than breech delivery—e.g. dysplasia of hip is most common in breech than cephalic presentation

TRANSVERSE LIE

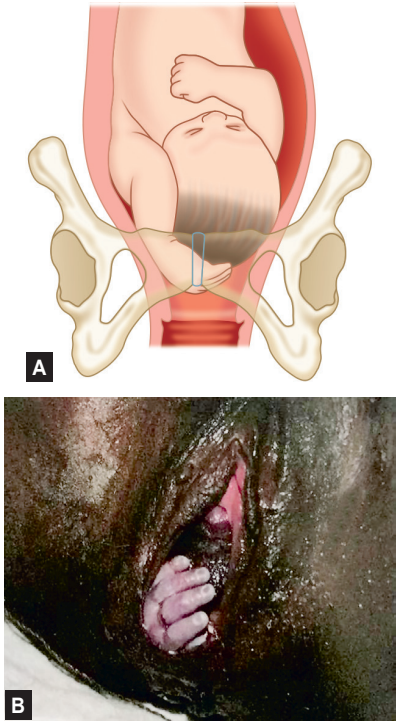
- Lie-transverse
- Presentation—shoulder
- When the long axis of the fetus lies perpendicularly to the maternal spine or centralized uterine axis, it is called transverse lie. But more commonly, the fetal axis is placed oblique to the maternal spine and is then called oblique lie
- The position is determined by the direction of the back which is the denominator. The position may be:
  - **Dorsoanterior** which is the commonest (60%)
  - **Dorsoposterior**.
- The incidence is about 1 in 200 births

- M/c cause—prematurity > platypelloid pelvis > multiparity

- Other causes are—twins—(it is more common for the second baby than the first one to be in transverse position), hydramnios, contracted pelvis, placenta previa, pelvic tumor, congenital malformation of the uterus—arcuate or subseptate
- No mechanism of labor
- **Diagnosis:**
  - The fundal height is less than the period of amenorrhea
  - Fundal grip—Fetal pole (breech or head) is not palpable
  - Pelvic grip—The lower pole of the uterus is found empty. This, however, is evident only during pregnancy but during labor, it may be occupied by the shoulder
  - During labor on P/V examination—The characteristic landmarks are the feeling of the ribs and intercostal

JAYPEE BROTHERS

spaces **(grid iron feel)**. On occasion, the arm is found prolapsed.



Figs. 11.9A and B: Compound presentation. (A) The left hand is lying in front of the vertex. With further labor, the hand and arm may retract from the birth canal, and the head may then descend normally; (B) Photograph of a small 34-week fetus with a compound presentation that delivered uneventfully with the hand presenting first.

Note: It should be remembered that the findings of a prolapsed arm is confined not only to transverse lie but it may also be associated with compound presentation.

- Determination of position: The thumb of the prolapsed hand, when supinated, points toward the head, the palm corresponds to the ventral aspect.

Management

- Management of transverse lie or shoulder presentation is always cesarean, whether baby alive or dead

Note: With cesarean delivery, because neither feet nor head of fetus occupies lower uterine segment a low transverse increase may lead to difficult extraction hence vertical hysterectomy incision is preferred

- If it recognized in pregnancy—External Cephalic Version can be tried.

Note: In modern day obstetrics, destructive procedures are not done for managing transverse lie. Earlier the destructive procedure done for transverse lie were—decapitation and evisceration.

Twin with Transverse Lie

- If first twin is transverse lie—management is cesarean section
- If second twin is transverse lie—First twin is delivered by vaginal delivery and then general anesthesia given to mother in OT followed by internal podalic version to make the fetus breech. Then breech is delivered by breech extraction.

Corpora conduplicata: If fetus is less than 800 gm, preterm and IUD—spontaneous expulsion can occur as thoracic wall below the shoulder appears at the vulva. Then head and thorax pass through the cavity and fetus is expelled by doubling up.

Remember: With transverse lie > Footling > knee presentation

Guidelines for the Management of Transverse Lie

Antenatal	During labor
↓	↓
External cephalic version in all cases beyond 36 weeks	Before/early labor ↓ membranes ruptured and When liquor is adequate ↓ External cephalic version ↓ If version fails/contraindicated ↓ Cesarean section
↓	
If version fails or is contraindicated	Active/late labor with inadequate liquor ↓ Cesarean section
↓	
Cesarean section at 38 weeks	

JAYPEE BROTHERS

UNSTABLE LIE

This is a condition where the presentation of the fetus is constantly changed even beyond 36th week of pregnancy when it should have been stabilized.

Causes

The causes are those which prevent the presenting part to remain fixed in the lower pole of the uterus:

- Grand multipara (commonest cause)
- Polyhydramnios
- Contracted pelvis
- Placenta previa
- Pelvic tumor.

Note: Oligohydramnios and uterine malformations can lead to malpresentations but not unstable lie.

Management

The patient is to be admitted at 37th completed week. Premature or early rupture of the membranes with cord prolapse is the real danger.

Treatment: Elective cesarean section is done in majority of the cases.

Note: M/C cause of fetal death in unstable lie is cord prolapse.

Stabilizing induction of labor: External cephalic version is done (if not contraindicated) after 37 weeks → oxytocin infusion is started to initiate effective uterine contractions. This is followed by low rupture of the membranes (amniotomy). Labor is monitored for successful vaginal delivery. This procedure may be done even after the spontaneous onset of labor.

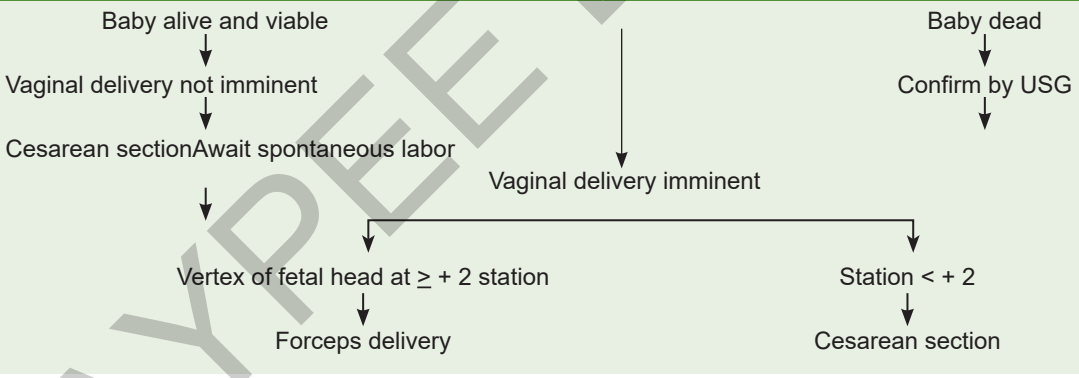
CORD PROLAPSE

Cord Prolapse: Cord prolapse is the condition where the umbilical cord lies below the presenting part after rupture of membranes.

- **In cord presentation**, the membranes are intact
- **In occult cord prolapse,** the cord is by the side of the presenting part, but not felt by the examining fingers

Maximum chances of cord prolapse are with—Transverse lie> footling> knee> complete breech>frank breech

Management of Cord Prolapse



JAYPEE BROTHERS

New Pattern Questions

N1. In deep transverse arrest, all of the following can be done *except:*
a. Cesarean section b. Vacuum extraction
c. Kielland forceps d. Wrigley's forceps

N2. In case of IVD with transverse are, following can be done *except*:
a. Decapitation b. Evisceration
c. Craniotomy d. Cesarean section

N3. Face to pubis delivery occurs in which position?
a. Occipito sacral position
b. Mentoanterior
c. Mentoposterior d. Blow presentation

N4. Least chances of cord prolapse are seen with:
a. Frank breech b. Complete breech
c. Footling d. Knee

N5. In left oblique breech presentation, head engages in:
a. Right oblique diameter
b. Left oblique
c. Right transverse d. Left transverse

N6. In transverse lie, the presentation is:
a. Vertex b. Breech
c. Brow d. Shoulder

N7. In an after-coming head the following bone is perforated during craniotomy:
a. Occiput b. Parietal
c. Palate d. Frontal

N8. The most common form of fetal traumatic injury incurred during breach extraction is:
a. Rupture of the liver b. Rupture of the spleen
c. Intraadrenal hemorrhage
d. Intracranial hemorrhage

N9. A woman is getting 3 uterine contractions per 10 minutes. The fetus is in cephalic presentation and the head is not engaged. On vaginal examination the cervical dilatation is 5 cm. The forehead, supraorbital ridges and the bridge of the nose are felt. The fetal heart rate is 140 beats per minute. The pelvis is adequate.

What is the most appropriate treatment?
a. Allow labor to continue without interference for 4 hours
b. Carryout manual rotation of the head after full dilatation of the cervix
c. Perform a cesarean section as soon as possible
d. Perform an amniotomy and commence an oxytocin infusion

N10. ECV is absolutely contraindicated in all *except*:
a. Previous LSCS scar
b. Severe preeclampsia
c. Placenta previa d. Septate uterus

N11. A multipara is admitted to the ward at a period of amenorrhea of 40 weeks. The uterus is relaxed and there are no uterine contractions. The fetus is in the transverse lie. The cervical os is closed. She has no other pregnancy complications. The ultrasound scan does not reveal any other abnormalities and the cardiotocography is normal.

What is the most appropriate management?
a. Perform a lower segment cesarean section
b. Perform an external cephalic version soon after onset of labor
c. Perform an external cephalic version immediately
d. Perform an internal version during the second stage of labor

N12. A second para is admitted in advanced labor at a period of amenorrhea of 40 weeks. She has a single fetus in the transverse lie. The fetal heart beat is absent. On vaginal examination the cervix is fully dilated. The presenting part is the shoulder.

What is the most appropriate management?
a. Await spontaneous delivery of the dead fetus
b. Perform a cesarean section immediately
c. Perform a decapitation operation
d. Perform an external cephalic version

N13. A primipara with a breech presentation is in the second stage of labor for 2 hours. The fetal heart rate is 140 beats per minute. She is getting 3 uterine contractions per 10 minutes. The breech is felt at the level of the ischial spines. The membranes are absent. The pelvis is adequate. The estimated fetal weight is 3 kg.

What is the most appropriate management?
a. Commence an infusion of oxytocin
b. Improve maternal hydration with intravenous fluids
c. Observe for a further period of 1 hour for spontaneous delivery to occur
d. Perform a lower segment cesarean section

N14. A 40-year-old primipara who has been infertile for 12 years attends the antenatal clinic of 37 weeks. The fetus is in breech presentation. The estimated fetal weight is 3 kg. The pregnancy is otherwise uncomplicated. The pelvis is adequate.

What is the best management option?
a. Await spontaneous onset of labor and normal vaginal delivery
b. Perform a cesarean section at 39 weeks
c. Perform a cesarean section, if labor becomes prolonged
d. Perform an external cephalic version

JAYPEE BROTHERS

N15. A 28-year-old primipara attends the antenatal clinic at a period of amenorrhea of 35 weeks. She has a single fetus in breech presentation. Ultrasound scan confirms breech presentation. No other abnormalities are detected. She is 5' 3" in height. Her pregnancy is otherwise uncomplicated.

What is the next step in the management?

a. Allow a normal vaginal delivery
b. Induce labor, if not delivered by 41 weeks
c. Perform an elective cesarean section at 39 weeks
d. Perform an external cephalic version at 36 weeks

N16. A 30-year-old G1P1001 patient comes to see you in office of 37 weeks gestational age for her routine OB visit. Her 1st pregnancy resulted in a vaginal delivery of a 9-lb, 8-oz baby boy after 30 minutes of pushing. On doing Leopold maneuvers during this office visit, you determine that the fetus is breech. Vaginal examination demonstrate that the cervix is 50% effaced and 1–2 cm dilated. The presenting breech is high out of pelvis. The estimated fetal weight is about 7 lb. you send the patient for a USG which confirms a fetus with a frank breech prestation. There is a normal amount of amniotic fluid present, and the head is well-flexed. As the patient's obstetrician, you offer all the following possible management plans *except*:

a. Allow the patient to undergo a vaginal breech delivery whenever she goes into labor
b. Send the patient to labor and delivery immediately for an emergent LSCS
c. Schedule a LSCS at or after 39 weeks gestation age
d. Schedule an external cephalic version in next few days

N17. In a case of direct occipito-posterior position (face to pubis delivery) most commonly encountered problem is:

a. Intracranial injury b. Cephalhematoma
c. Paraurethral tears d. Complete perineal tears

N18. Deep transverse arrest is seen in all *except*:

a. Android pelvis b. Epidural analgesia
c. Transverse lie d. Uterine inertia

N19. A 30-years-old primipara in labor with transverse lie. Treatment of choice is:

a. Internal cephalic version
b. Emergency cesarean section
c. Wait and watch
d. External cephalic version

N20. The complications of shoulder presentations are all of the following *except*:

a. Fetal death b. Uterine rupture
c. Obstructed labor d. Shoulder dystocia

N21. In case of unstable lie of fetus, the placenta is usually:

a. Cornual b. Lateral wall
c. Fundus d. Placenta in lower segment

N22. The following statements are related to occipito-posterior *except*:

a. Malrotation of occiput may cause occipito acral arrest
b. 10% cases are associated with anthropoid-or android pelvis
c. Incomplete forward rotation of occiput may cause deep transverse arrest
d. Nonrotation of occiput may cause are associated

N23. The following are related to face presentation *except*:

a. The commonest position is LMA
b. Engaging diameter is submentobregmatic
c. The diameter distending the vulval outlet is mentovertical
d. During moulding, there is elongation of occipitofrontal diameter

N24. In which fetal presentation vaginal delivery can be expected?

a. Face presentation when the chin lies direct to the sacrum
b. Brow presentation
c. Shoulder presentation
d. Face presentation when the chin lies under the symphysis pubis

N25. For the deep transverse arrest all are correct *except*:

a. Head is deep into the pelvic cavity
b. Sagittal suture lies in the bispinous diameter
c. There is no progress at least for 1 hour following full dilatation of the cervix
d. Delivery should be done by immediate cesarean section

N26. Which of the following is correctly matched in breech delivery?

A. Lovset's maneuver	1. After-coming head of breech
B. Burn-Marshall method	2. Shoulder delivery
C. Prague maneuver	3. OP position head
D. Groin traction	4. Delivery of breech

a. A = 3 B = 1 C = 4 D = 2
b. A = 2 B = 1 C = 3 D = 4
c. A = 2 B = 1 C = 4 D = 3
d. A = 3 B = 1 C = 2 D = 4

N27. Procedure to be performed in the case of arrest of after-coming head due to contracted pelvis in breech:

a. Craniotomy b. Decapitation
c. Zavanelli maneuver d. Cleidotomy

JAYPEE BROTHERS

Previous Year Questions

1. **The commonest cause of breech presentation is: [AIIMS May 03, AI 97]**
   a. Prematurity b. Hydrocephalus
   c. Placenta previa d. Polyhydramnios

2. **All of the following are associated with breech presentation at normal full-term pregnancy, *except*: [AI 02]**
   a. Placenta accreta
   b. Fetal malformation
   c. Uterine anomaly
   d. Cornual implantation of placenta

3. **Causes of breech presentation are: [PGI June 03]**
   a. Hydrocephalus b. Oligohydramnios
   c. Pelvic contracture d. Placenta previa

4. **Best method to deliver arms in breech: [PGI June 98]**
   a. Lovset's method b. Smellie-Veit
   c. Pinard's maneuver d. Any of the above

5. **The after-coming head of breech, chin to pubis is delivered by: [PGI Dec 98]**
   a. Maricelli technique
   b. Burns-Marshall method
   c. Lovest's method
   d. Manual rotation and extraction by Piper's forceps

6. **Techniques of delivery of after-coming head in breech presentation: [PGI June 07]**
   a. Burns-Marshall method
   b. Forceps delivery
   c. Modified Mauriceau-Smellie-Veit technique
   d. Lovset's maneuver

7. **After-coming head of breech will have difficulty in delivery in all of the following conditions *except*: [AIIMS Nov 06, Nov 03, Nov 11]**
   a. Hydrocephalus b. Placenta previa
   c. Incomplete dilation of cervix
   d. Extension of head

8. **Cause of death in breech delivery: [PGI 97]**
   a. Intracranial hemorrhage
   b. Aspiration
   c. Atlantoaxial dislocation
   d. Asphyxia

9. **True about Frank breech: [PGI Dec 02]**
   a. Thigh extended, leg extended
   b. Thigh flexed, knee extended
   c. Both are flexed
   d. Buddha's attitude e. Common in primi

10. **Breech presentation with hydrocephalus is managed by: [PGI June 02]**
    a. Cesarean section
    b. Transabdominal decompression
    c. PV decompression
    d. Craniotomy of after-coming head

11. **In deep transverse arrest the delivery of baby is conducted by: [PGI Dec 99]**
    a. Cesarean section b. Vacuum extraction
    c. Keilland forcep
    d. Manual rotation and forcep delivery

12. **38 weeks primi in early labor with transverse presentation, TOC is: [PGI Dec 98]**
    a. Allow for cervical dilatation
    b. Internal podalic version
    c. LSCS d. Forceps

13. **A 30 years old multigravida presented with transverse lie with hand prolapse in IInd stage of labor with dead fetus. The treatment is: [PGI June 03]**
    a. Chemical cesarean section
    b. LSCS c. Craniotomy
    d. Decapitation e. Cleidotomy

14. **M/C type of breech presentation:**
    a. Frank breech b. Complete breech
    c. Footling d. Knee

15. **The commonest cause of occipito-posterior position of fetal head during labor is: [AIIMS May 03]**
    a. Maternal obesity b. Deflexion of fetal head
    c. Multiparity d. Android pelvis

16. **When in labor, a diagnosis of occipito-posterior presentation is made. The most appropriate management would be: [AIIMS May 08/Nov 09]**
    a. Emergency CS
    b. Wait and watch for progress of labor
    c. Early rupture of membranes
    d. Start oxytocin drip

17. **Causes of face presentation: [PGI Dec 03]**
    a. Anencephaly b. Prematurity
    c. Hydramnios d. Contracted pelvis
    e. Placenta previa

18. **Which favor face presentation? [PGI Dec 09]**
    a. Anencephaly b. Contracted pelvis
    c. Placenta praevia d. Thyroid swelling
    e. Bicornuate uterus

19. **On per vaginal examination, anterior fontanelle and supraorbital ridge is felt in the second stage of labor. The presentation is: [AIIMS May 02]**
    a. Brow presentation b. Deflexed head
    c. Flexed head d. Face presentation

JAYPEE BROTHERS

for detailed information on obstetrics books, visit our website www.jaypeebrothers.com, for detailed information on obstetrics books, visit our website www.jaypeebrothers.com, for detailed

Sakshi Arora's Self Assessment & Review

OBSTETRICS

The 14th edition of *Sakshi Arora's Self Assessment & Review: Obstetrics* covers the entire obstetrics in a simple, holistic approach to cater for the needs of PG aspirants and UG students of India and abroad. New features of this edition are:

- Fully colored edition
- Theory before each chapter updated as per Williams's Obstetrics 26th edition
- Thoroughly revised and edited
- Recent papers—INI-CET 2024 May and NEET PG 2024 November
- New Pattern Questions have been added in each chapter, keeping in mind the latest trend of questions

FEATURES	SELF ASSESSMENT & REVIEW—OBSTETRICS	POPULAR BOOKS
Subject specialty	✓	✓
Fully colored	✓	×
Coverage of topics	Extensive (covers the entire obstetrics)	Selective
Number of questions	Over 3,000 questions explained	Around 400
NEET Pattern Questions	More than 400	×
Questions' coverage	2000–2024	–
Recent papers of INI-CET 2024 May and November	Added	×
Includes questions of PGI	✓	×
Instruments	✓	×
Image-based questions	✓	×
Ultrasound	✓	×
CTG tracings	✓	×

Printed in India

Available at all medical bookstores or buy online at www.ejaypee.com

JAYPEE BROTHERS
Medical Publishers (P) Ltd.
EMCA House, 23/23-B, Ansari Road,
Daryaganj, New Delhi - 110 002, INDIA
www.jaypeebrothers.com

Join us on facebook.com/JaypeeMedicalPublishers
Follow us on instagram.com/JaypeeMedicalPublishers

Shelving Recommendation
OBSTETRICS

ISBN 978-93-6616-749-7