

Block P

OSPES

KLMC

2025 Preproffs

By Fatima  
Haider

**Table 8: OSCE station distribution of different subjects**

<b>BLOCK-P (TOTAL STATIONS=20 and 6 marks/station)</b>					
<b>Subjects</b>	<b>OSCE stations</b>	<b>Viva stations</b>	<b>Short cases</b>	<b>Logbook and history books (1-station)</b>	<b>Structured Long case -30 marks)</b>
Gynaecology	7	1	2	Gynaecology And Obstetrics	Gynaecology And Obstetrics
Medicine+ Endocrinology	2	1	1		
Paediatrics	1	1	0		
Surgery	1	1	1		
<b>Total</b>	<b>11</b>	<b>4</b>	<b>4</b>	<b>1</b>	<b>1</b>

## SIMS SPECULUM (DUCK BILLED SPECULUM)

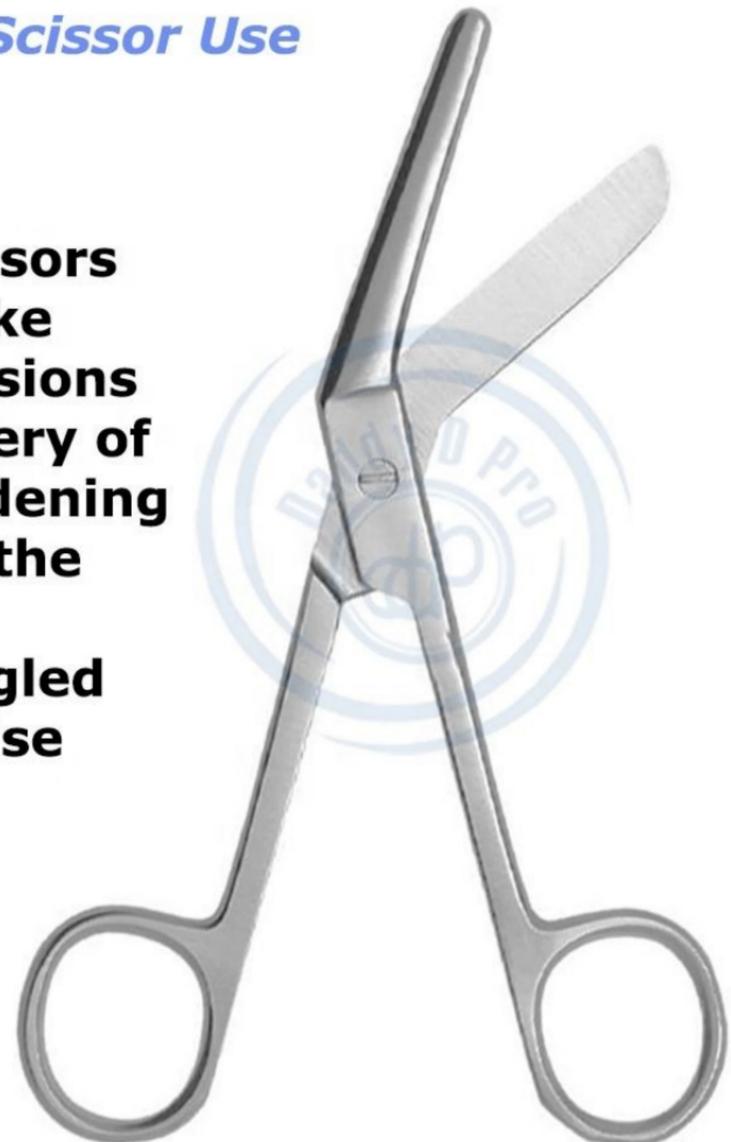
- ▶ Inspection & examination of vagina and cervix
- ▶ Examination of obstetric trauma or vaginal trauma
- ▶ Used for DNC
- ▶ 2 blades of different sizes





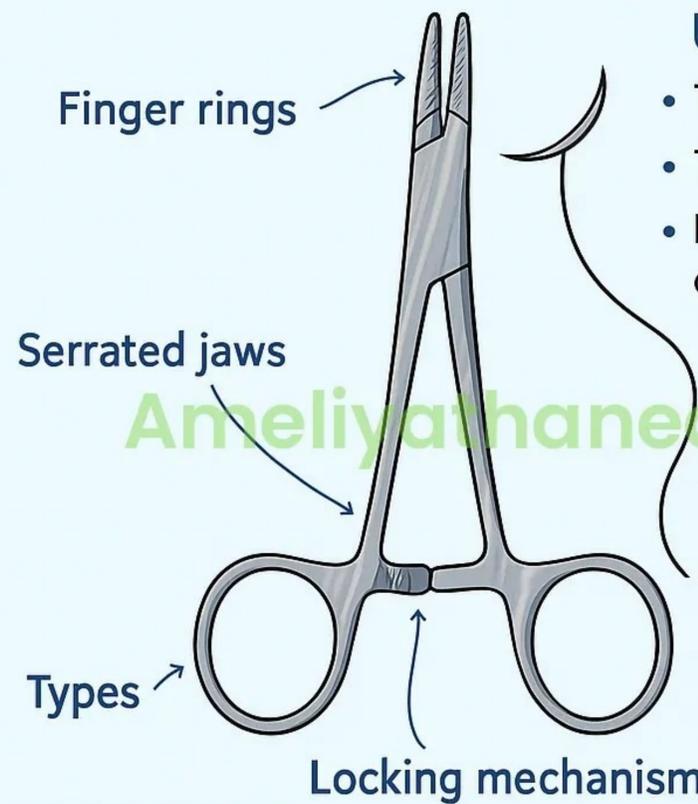
### *Episiotomy Scissor Use*

**Episiotomy scissors are used to make episiotomy incisions for easier delivery of the baby by widening the opening of the vagina. These scissors are angled to make a precise incision by the obstetrician.**





# Needle Holder



## Uses

- To hold suture needles
- To grasp suture material
- For suturing in surgery, dentistry, etc.

## Types

- Mayo-Hegar
- Crile-Wood
- Castroviejo

**Instrument**

Surgical tool

## Types:

- Mayo-Hegar
- Crile-Wood
- Castroviejo



Maxplus

**DISSECTING  
FORCEPS (Plain)**



**Dissecting Forceps/Plain and Toothed**

**Use**

**Toothed:- Use for grasping and Holding tissue, muscle or skin surrounding wound**

**Plain: It is used for blunt dissection i e. for pulling or tearing instead of cutting  
To hold the delicate structure like peritonium, vessels nerves and muscle**

# UNDESCENDED TESTICLES

An undescended testicle / testis is one that has not descended into the scrotal sac before birth

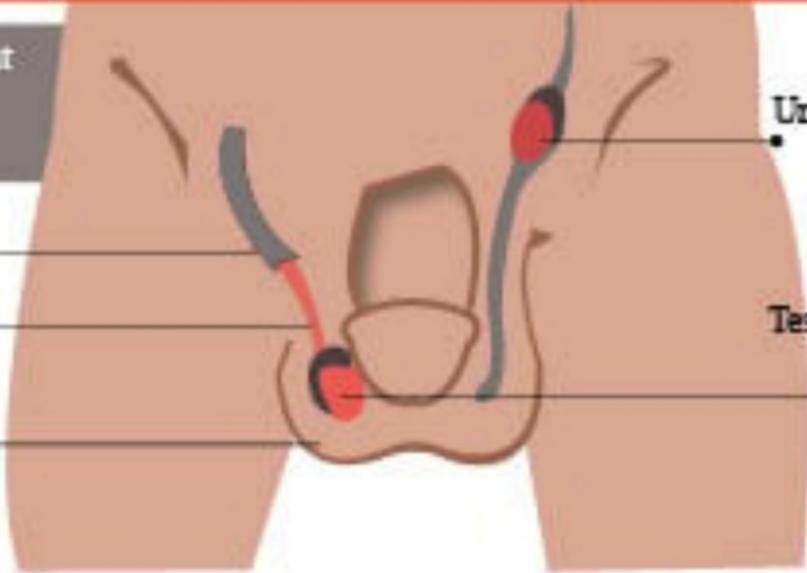
Superficial inguinal ring

Vas deferens

Scrotum

Undescended Testes

Testicle in normal position

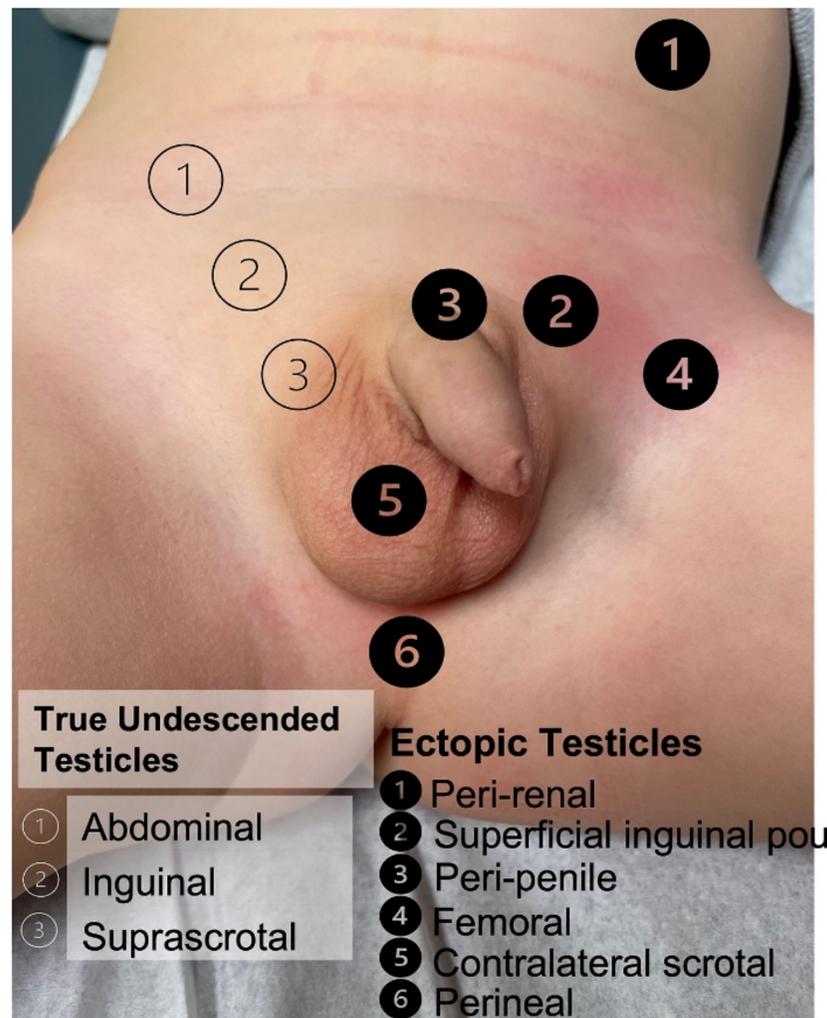


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14 year old boy with left inguinal swelling, pain and backache for 6 months (picture was given).

Q 1. Diagnosis

Q2. Write findings in image in 3 lines



## Counseling of a CKD patient

- \* Define episiotomy
- \* What surgical grade is it
- \* Types of episiotomy
- \* Indications
- \* Complications

\* An episiotomy is a surgical incision made in the perineum (the tissue between the vaginal opening and the anus) during childbirth to widen the vaginal opening.

\* *Second Degree Perineal Laceration*  
*is tear to cutaneous and subcutaneous tissue*  
*plus perineal muscles*

### Indications of episiotomy:

- Fetal distress.
- Short or inelastic perineum.
- Shoulder dystocia.
- Fetal malposition, e.g. occipito-posterior.
- An instrumental or breech delivery.
- Previous pelvic floor surgery.

### Complications

- **Immediate**
  - Extension of the incision to involve the rectum
  - Vulval haematoma
  - Infection
  - Wound dehiscence
  - Injury to anal sphincter causing incontinence of flatus or faeces
  - Rectovaginal fistula (Rarely)
  - Necrotising fasciitis

# Types of Episiotomy

## (ii). Types & Procedure:

- Episiotomy is performed by two different techniques:

Midline Episiotomy	Mediolateral Episiotomy
<ul style="list-style-type: none"> <li>It extends from the fourchette towards the anus.</li> <li>It is associated with:               <ul style="list-style-type: none"> <li>Less blood loss</li> <li>Easier to repair</li> <li>Heals quickly</li> <li>Less pain in postpartum period</li> <li>Anal sphincter injury</li> <li>Reduced incidence of dyspareunia</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>It extends from the fourchette towards the anus. <i>Starting at vaginal opening and angling downward and outward (typically 60°)</i></li> <li>It is associated with: <i>to protect anal sphincter</i> <ul style="list-style-type: none"> <li>Reduced risk of anal sphincter injury therefore the recommended incision</li> <li>More blood loss</li> <li>Difficult to repair</li> <li>Delayed healing</li> <li>More pain in postpartum period</li> </ul> </li> </ul>

## Types of Episiotomy



Midline Episiotomy

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Mediolateral Episiotomy

## Diagnose



### Varicocele grades

Grade 0 not detectable in physical exam but detected on ultrasound

Grade 1 palpable after valsalva

Grade 2 palpable after standing position

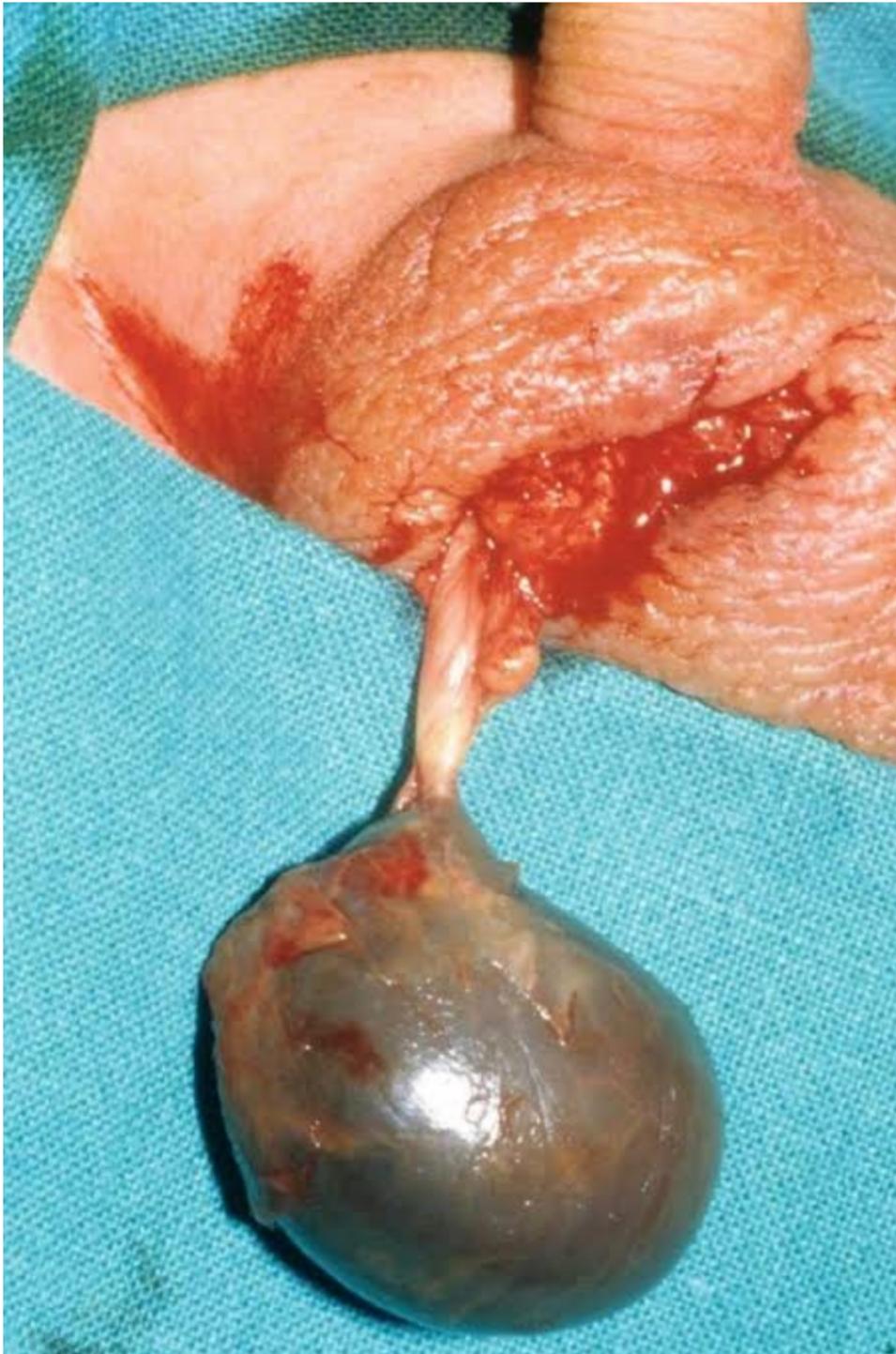
Grade 3 visible



Left renal mass  
Renal cell carcinoma

### Types of Nephrectomy

Type	Tissue Removed	Common Indication
Simple	Kidney	Non-functioning kidney
Radical	Kidney + fat + fascia ± adrenal ± nodes	RCC, large tumors
Partial	Part of kidney	Small tumor, preserve function
Laparoscopic	Kidney via minimal incision	Any of above, if suitable
Donor	Kidney	Living kidney transplant

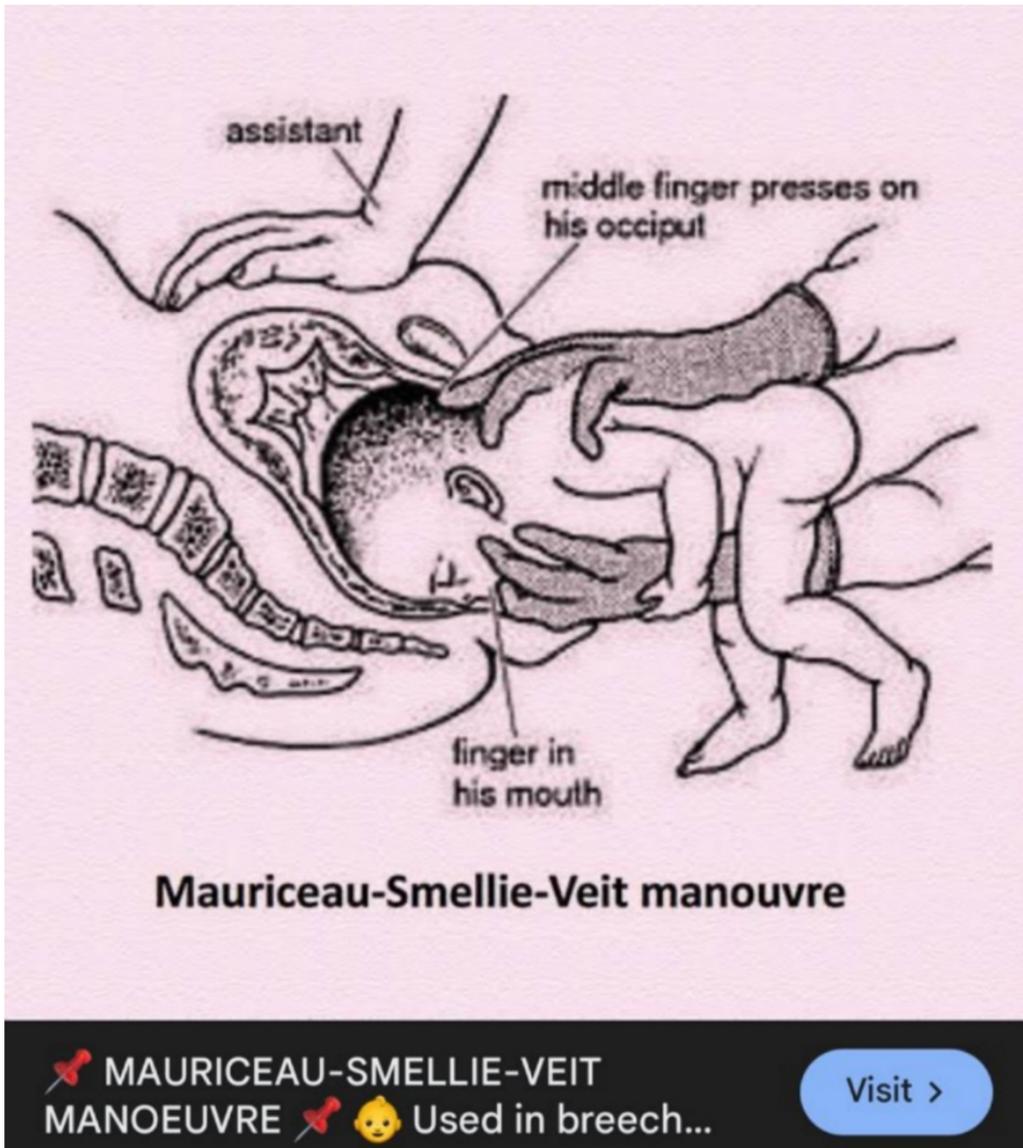


Testicular  
Torsion

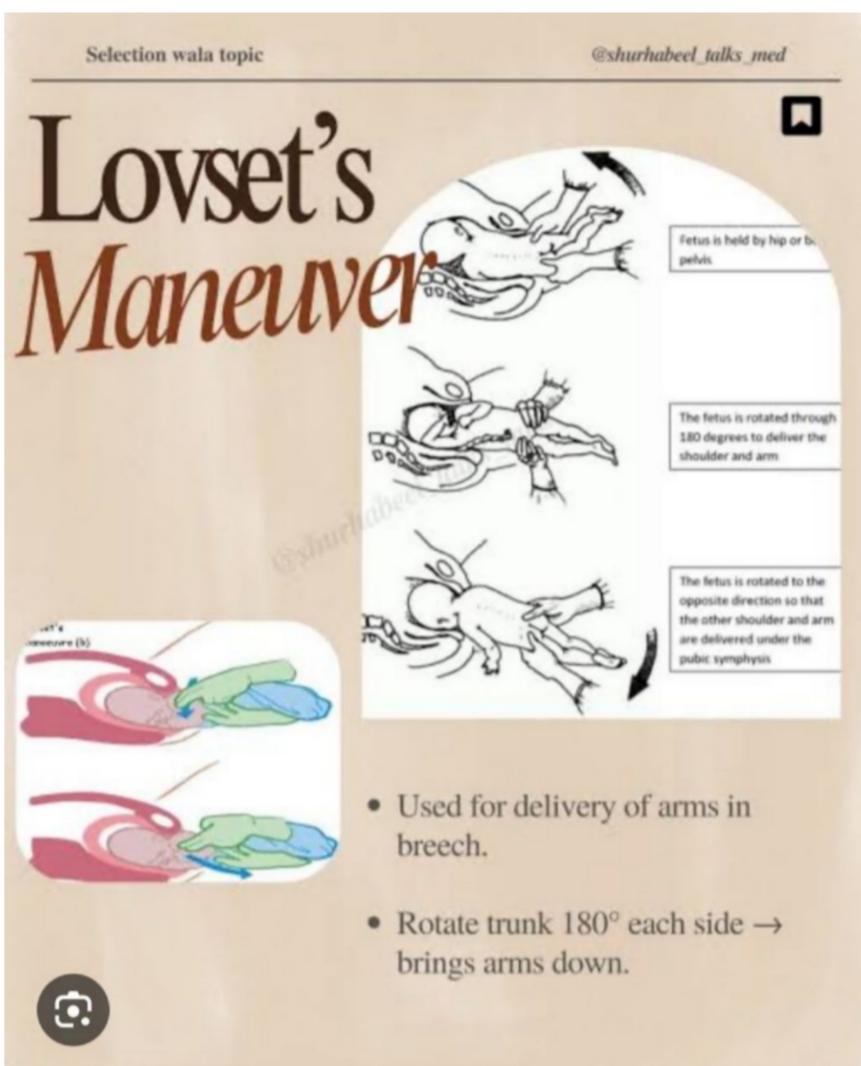
## Testicular Torsion

- Adolescent boy with sudden, severe unilateral scrotal pain, often waking him from sleep, associated with nausea and vomiting.
  - Sudden onset scrotal pain
  - Nausea & vomiting (very common)
  - Neonates and adolescents (12–18 years)
  - Physical Examination Findings
    - High-riding testis - Affected testis sits higher than normal
    - Horizontal lie of testis - Due to bell-clapper deformity
    - Absent cremasteric reflex - Most sensitive physical sign (Stroking inner thigh → no testicular elevation)
    - Swollen, tender scrotum
    - Negative Prehn sign - Elevation of testis does NOT relieve pain
  - Do NOT delay surgery for imaging if suspicion is high
  - Doppler US shows absent blood flow (if done)
  - Immediate surgical exploration should be done
  - Bilateral orchiopexy (even if torsion is unilateral)
  - “Sudden scrotal pain + vomiting in adolescent” → torsion
  - “Absent cremasteric reflex” → torsion
  - “High-riding, horizontal testis” → torsion
  - “Negative Prehn sign” → torsion
-

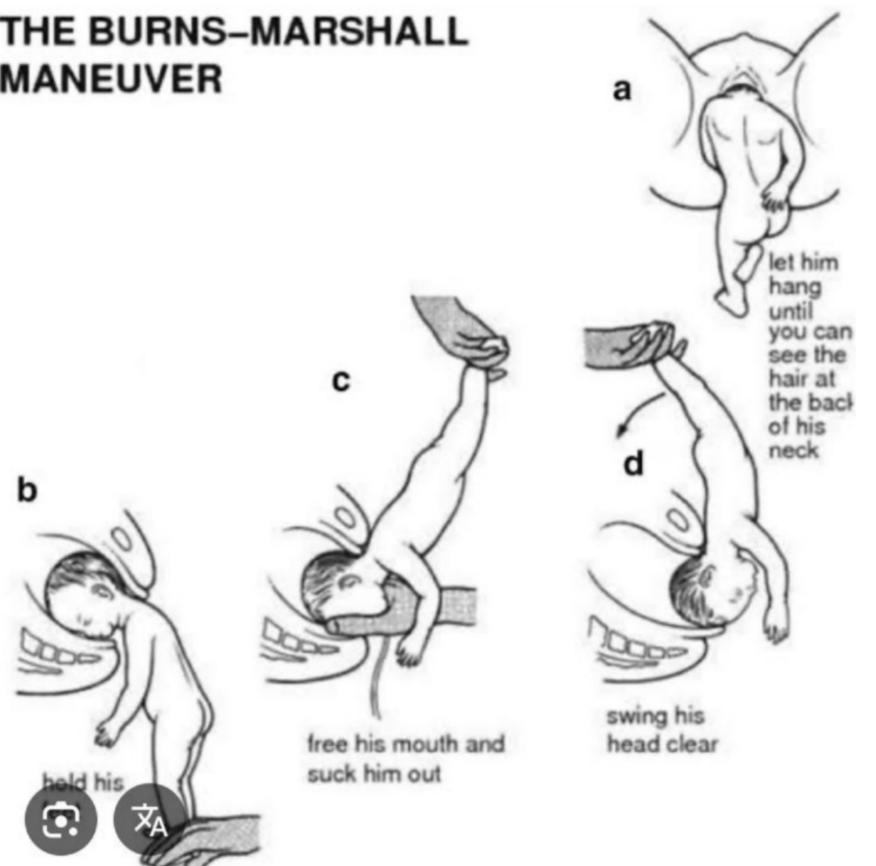
# Maneuvers Names in Breech Maneuvers



- Manoeuvre of Breech identification
- 1) Mauriceau-Smellie-Veit (MSV) maneuver
  - 2) burns Marshall manoeuvre
  - 3) lovset's manoeuvre



## THE BURNS-MARSHALL MANEUVER



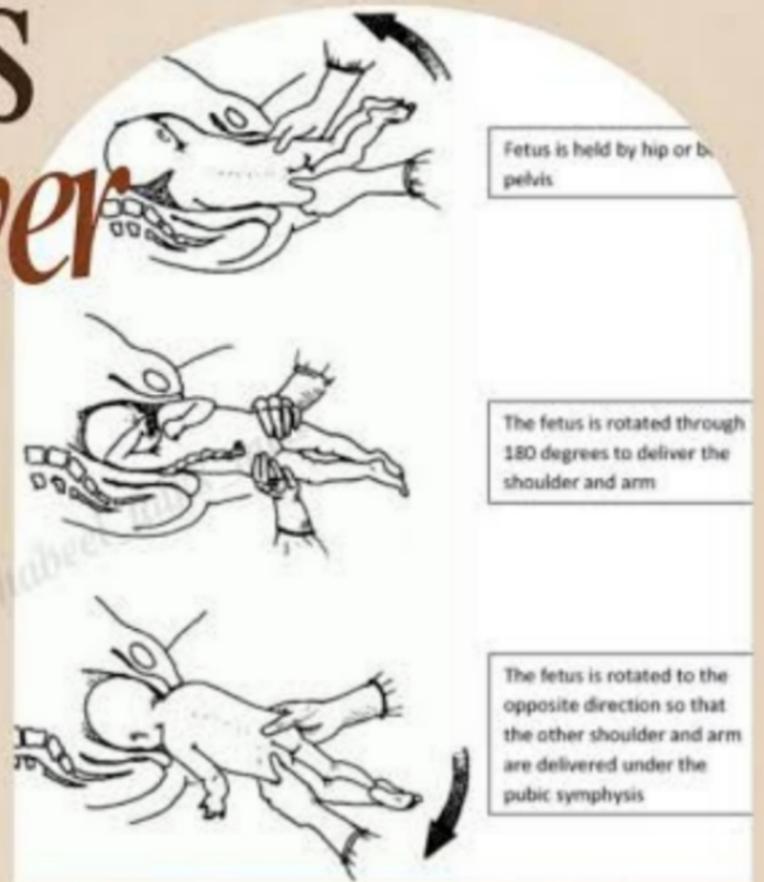
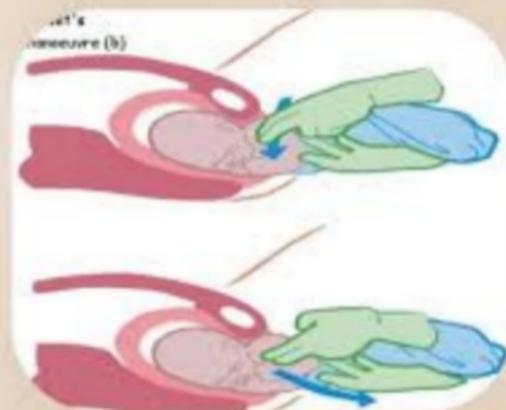
# Pinard's Maneuver

- First-line maneuver.



- For extended legs in breech → apply pressure in popliteal fossa → flex and bring out leg.

# Lovset's Maneuver



- Used for delivery of arms in breech.
- Rotate trunk 180° each side → brings arms down.

# Burns— Marshall

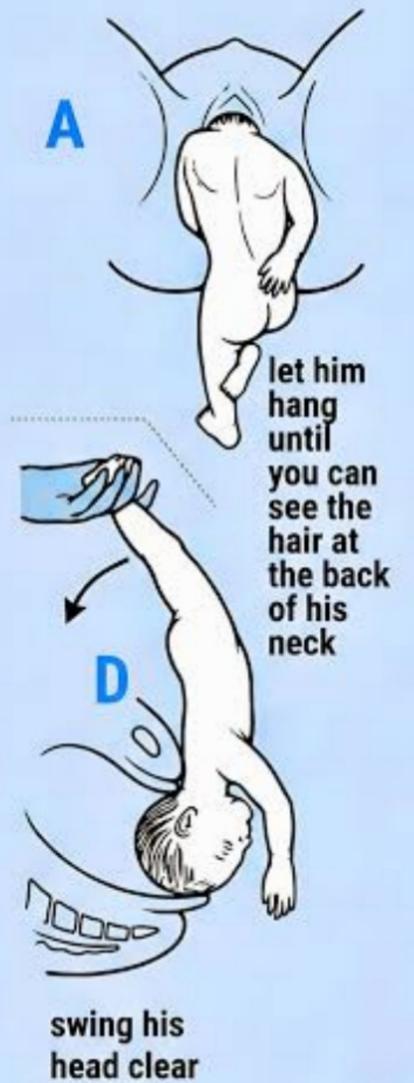
## Technique



- After body delivery → allow fetus to hang until nape visible → then lift body upwards for head delivery.

### THE BURNS-MARSHALL MANOEUVRE

#### How Is a Breech Baby Delivered?



# Mauriceau Smellie Veit Maneuver



- For delivery of after-coming head.
- Baby astride forearm → two fingers in fetal mouth for flexion, other hand applies pressure on shoulders → controlled head delivery.

# Prague Maneuver



FIGURE 22-18. Delivery of the aftercoming head using the modified Prague maneuver necessitated by failure of the fetal trunk to rotate anteriorly.



- For after-coming head when fetus is partly extended.
- Grasp shoulders with one hand and hook fingers of other hand on occiput → flex and deliver head.

A 7 yr old boy with swelling in eyes: nephrotic syndrome  
Investigations and treatment



*Nephrotic Syndrome*

### **Investigations**

- \* Urine Dipstick test - Specific for albumin (detects concentration of 30 mg/dL or higher)
- \* Urinalysis
  - RBC cast suggest glomerulonephritis
  - WBC cast suggest Pyelonephritis and interstitial nephritis
  - Fatty casts suggest Nephrotic syndrome
- \* Test for Microalbuminuria - corresponds to albumin excretion of 30 to 300 mg/day

### 3. Management of Minimal Change Disease

#### A. General Measures

- **Edema management:**
  - Salt restriction (2 g/day)
  - **Diuretics** if severe edema (furosemide)
  - Monitor weight & electrolytes
- **Infection prevention:**
  - Vaccinate (pneumococcal, influenza)
  - Early treatment of infections
- **Thrombosis prevention:**
  - Usually not required in children unless severe hypoalbuminemia (<2 g/dL) or immobilized

#### B. Specific Therapy: Corticosteroids

##### First-line:

- **Prednisolone:** 60 mg/m<sup>2</sup>/day (max 80 mg) for 4–6 weeks

##### First-line:

- **Prednisolone:** 60 mg/m<sup>2</sup>/day (max 80 mg) for 4–6 weeks
- Then **alternate-day prednisolone** 40 mg/m<sup>2</sup> for 2–4 weeks
- **Taper gradually** over total 2–3 months

##### Response:

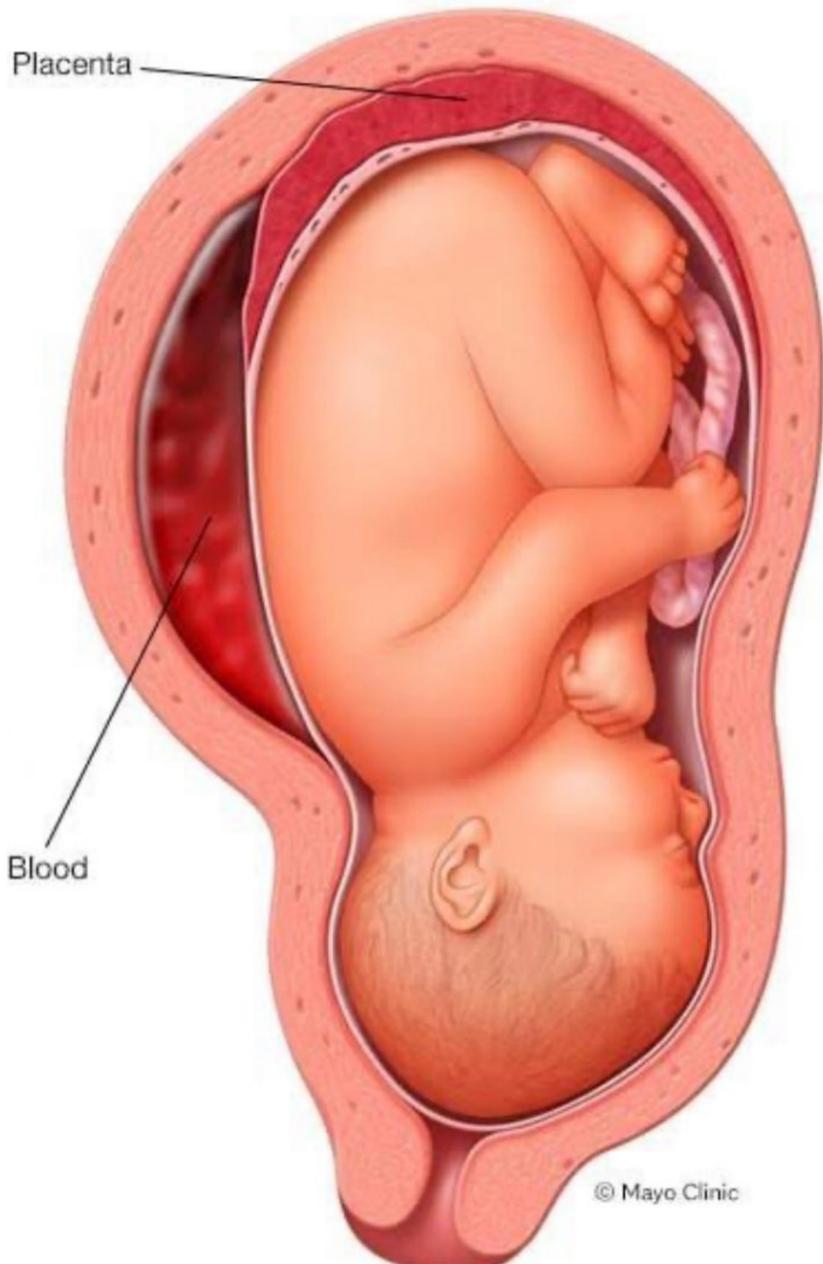
- **Children:** 80–90% respond (steroid-sensitive)
- **Adults:** 60–70% respond; response may be slower

#### C. Relapse Management

- **Relapses** are common, often triggered by infections
- **Treatment:** same steroid protocol; may use **alternate-day dosing**
- **Frequent relapsers:** consider **steroid-sparing agents:**
  - Cyclophosphamide
  - Levamisole (children)
  - Calcineurin inhibitors (cyclosporine/tacrolimus)

#### D. Supportive Measures

- **Nutrition:** moderate protein (1 g/kg/day)
- **Hyperlipidemia:** usually resolves after remission
- **Avoid nephrotoxic drugs**



- Placental abruption picture
- 1) Identify the photograph
  - 2) what are the maternal risks
  - 3) what are the fetal risks

## \* Placental Abruption

The partial or complete separation of the placenta from the uterus prior to delivery; subsequent hemorrhage occurs from both maternal and fetal vessels.

### (iv). Complications:

#### • Maternal Complications:

- Hypovolaemic shock
- Sheehan syndrome
- Feto-maternal hemorrhage
- Maternal mortality
- Disseminated Intravascular Coagulation
- Acute Renal Failure, which results from:
  - Hypovolaemia, hypotension, and DIC.
  - Acute tubular necrosis.

#### • Fetal Complications:

- Perinatal mortality
- Preterm birth, Fetal growth restriction (FGR)

## Maternal and Fetal Risks

- **Intrauterine fetal death**
- **Maternal DIC and hypovolemic shock:** occurs as a result of blood loss and massive coagulation; the placenta is rich in tissue thromboplastin, which is released as a result of the placental abruption.
- **Couvellaire uterus**
  - Retroplacental hemorrhage may extend through the uterus into the peritoneum.
  - The myometrium is weakened, with possible subsequent uterine rupture during contractions.

Ospe Station block P

1. What is CTG? Definition?
2. What are its 5 variables
3. What are its uses in obstetrics
4. What does late deceleration signify

## What is cardiotocography?

**Cardiotocography** (CTG) is used during pregnancy to monitor fetal heart rate and uterine contractions. It is most commonly used in the third trimester and its purpose is to monitor fetal well-being and allow early detection of fetal distress. An abnormal CTG may indicate the need for further investigations and potential intervention.

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Variables of ctg

1. Baseline FHR
2. Beat to beat variability
3. FHR Accelerations
4. Decelerations

★ A CTG (cardiotocography) machine is used to monitor a baby's heart rate and the mother's uterine contractions during pregnancy and labor. Its primary uses include assessing fetal well-being, identifying signs of fetal distress or lack of oxygen (hypoxia), and helping guide decisions about the delivery

★ Late Decelerations indicate insufficient blood flow to uterus and placenta

- Causes of insufficient blood flow
  - Maternal hypotension
  - Preeclampsia
  - Uterine hyperstimulation
- indicates fetal hypoxia

Normal vaginal delivery on dummy

Station : Normal vaginal delivery not labor !!!  
And delivery of placenta

## ◆ Steps of Normal Vaginal Delivery (Vertex Presentation)

### 1. Engagement

- Biparietal diameter passes the pelvic inlet.
- Head enters pelvis (usually in occipito-transverse position).

### 2. Descent

- Downward movement of the fetal head through the pelvis.
- Occurs throughout labor, especially in second stage.

### 3. Flexion

- Chin moves towards chest.
- Smaller diameter (suboccipito-bregmatic, 9.5 cm) presents.

### 4. Internal Rotation

- Occiput rotates anteriorly towards the symphysis pubis.
- From transverse → occipito-anterior (OA).

### 5. Extension

- Head extends under the pubic symphysis.
- Vertex → brow → face → chin delivered.

### 6. Restitution

- Head rotates 45° to realign with shoulders.

### 7. External Rotation

- Shoulders rotate into anteroposterior diameter of pelvis.
- Head rotates accordingly.

### 8. Expulsion

- Anterior shoulder delivers under pubic symphysis.
- Posterior shoulder and rest of body follow.

G3p2 women present to ER with profuse bleeding after delivering a 4kg baby. Write the management for this patient.

### III. Management:

- Obstetric hemorrhage protocol (ABCDE) & call senior help
- Stop uterine bleeding:
  - Massage the uterus
  - Bimanual compression if atony is the cause
  - Remove any clots in the uterus and vagina
- Uterotonic Agents in a stepwise manner:
  - Oxytocin 5-10 units IM/IV
  - Oxytocin 40 units in 100mL normal saline over 4 hours
  - Rectal misoprostol 800-1000 microgram
  - Syntometrine (ergometrine 500 µg + syntocinon 5 units)
  - Repeat ergometrine 500 µg IM or IV
  - Carbaprost 0.25 mg by IM with intervals of  $\geq 15$  minutes (up to maximum 8 dose)
- In cases of persistent bleeding:
  - Look for genital tract trauma and repair.
  - Correct coagulopathy if DIC is present
  - Call senior help interventional radiologist, obstetrics
- Surgical Options:
  - Uterine artery embolization (UAE)
  - Iliac artery ligation
  - Uterine balloon insertion
  - Hysterectomy → considered as last resort in uncontrolled PPH

# Postpartum Hemorrhage (PPH)

- Blood loss  $\geq 500$  ml or blood loss manifesting with features of hypovolemia within 24 hours of delivery

## \* Common Causes of PPH

- Uterine Atony
- Uterine Inversion
- Abnormal placental separation
  - Retained placenta
  - Abnormal placentation
- Birth trauma
  - Iatrogenic Injury
- Velamentous cord insertion

## \* Secondary Causes

- Retained products of conception
- Subinvolvement of placental site
- Coagulation Disorder
- Postpartum endometritis

# BPP COMPONENTS AND SCORE

to lack of evidence from randomized trials.

BPP consists of:

	<u>Variables</u>	<u>Normal (Score 2)</u>	<u>Abnormal (Score 0)</u>
1	Breathing movements	≥ 30 movements in 30 min	< 30 movements in 30min
2	Gross body movements	≥ 3 body movements in 30 min	< 3 body movements in 30 min
3	Fetal tone	≥ 1 episode body/limb extension followed by return to flexion	Absent fetal movement or flexion
4	CTG (Cardiotocograph)	Reactive (see below)	< 2 accelerations in 40 min
5	Amniotic Fluid Volume	> 1 pool of fluid <i>large and free pocket of fluid over lum</i>	< 1 cm pocket of fluid

Interpretation:

○ Score of 8 or 10:

- Highly reassuring of fetal well-being
- Repeat the test weekly or as indicated.

○ Score of 4 or 6:

- This is worrisome.
- Delivery if fetus is >36 weeks
- Repeat after 12-24 hr if < 36 weeks.

○ Score of 0 or 2:

- Highly predictive of fetal hypoxia.
- Prompt delivery regardless of gestational age.

### Static Station 16

A mother brings her 10 years old son to the emergency room with the history of increased urination for the last one month, increased water drinking for the last 2 weeks and fast breathing for the last 2 days. Examination shows GCS 7/15, fast and deep breathing at 45 breaths per minute. He has no crepitations or rhonchi and no neck stiffness. He also has sunken eyes and his skin pinch goes back in 4 seconds.

#### Questions:

1. What is the most likely diagnosis?
2. What investigations are urgently needed?
3. Briefly write the treatment.

1. Diabetic Ketoacidosis

## 2 Urgent Investigations

These must be done immediately:

### 📍 Bedside

- Random blood glucose (RBS)
- Urine ketones
- Capillary blood ketones (if available)

### 📍 Blood tests

- ABGs → metabolic acidosis ( $\downarrow$  pH,  $\downarrow$   $\text{HCO}_3^-$ )
- Serum electrolytes (especially potassium)
- Serum urea & creatinine
- Serum osmolality

### 📊 Diagnostic Criteria of DKA

- Glucose > 200 mg/dL
- pH < 7.3
- $\text{HCO}_3^-$  < 15 mEq/L
- Ketonemia/ketonuria

## 1 Most Likely Diagnosis

Severe Diabetic Ketoacidosis (DKA) with dehydration and altered consciousness

### Why?

- Polyuria (1 month) → osmotic diuresis
- Polydipsia (2 weeks) → dehydration
- Fast deep breathing (45/min) → Kussmaul breathing (metabolic acidosis compensation)
- GCS 7/15 → severe DKA / possible cerebral edema
- Sunken eyes + skin pinch 4 sec → severe dehydration
- No chest signs or meningitis signs

Most likely underlying condition:

- 👉 New-onset Type 1 Diabetes Mellitus

## 3 Brief Treatment (Emergency Management)

Management priority:

Fluids → Insulin → Electrolytes → Monitoring

1. Fluid Resuscitation (FIRST STEP)
2. Insulin Therapy
3. Potassium Replacement
4. Add Dextrose
5. Monitor for Cerebral Edema

# Acromegaly Scenario



Facial features of acromegaly: a prominent jaw line (macrogynathia) as well as frontal bossing (prominent, protruding forehead).

• Two Signs

• Investigations

Investigation for acromegaly

Serum GH and IGF 1

Serum prolactin

Oggt(gh suppression test)

Mri brain

Pituitary overproduction of growth hormone → enlarged connective tissue, bones, and visceral organs

- macrogynathia (enlarged jaw)
- macroglossia (enlarged tongue)
- enlargement of nose, epiglottis, pharyngeal tissue, laryngeal tissue



Two classic clinical signs of Acromegaly:

**1** Enlarged hands and feet

- Increased ring or shoe size
- Spade-like hands

**2** Coarse facial features

- Frontal bossing
- Enlarged nose and lips
- Prognathism (protruding jaw)



Identify the instrument  
Medicines delivered by it  
Complications

1. Insulin Syringe

2- Medicines Delivered by it:

• GH

• Insulin

• Octreotide

### Complications of Insulin Therapy

- 1. Local allergic reactions** - redness, swelling, tenderness, induration or a 2 to 4 cm wheal) may appear at injection site 1 to 2 hrs. after insulin administration.
- 2. Systemic allergic reactions** – rare; immediate local skin reaction that gradually spreads into generalized urticaria.
- 3. Insulin Lipodystrophy** – localized reaction occurring at the site of the insulin injections.
  - **Lipoatrophy** – loss of sub Q fats and appears as slight dimpling of sub Q fats.
  - **Lipohypertrophy** – dev't. of fibrofatty masses at the injection site.

# Diabetic Foot Examination

- \* Inspection
  - Inspect b/w toes and posterior aspect of heels for hidden ulcers
- \* Palpate posterior tibial pulse
  - Located posterior and inferior to medial malleolus
- \* Palpate dorsalis pedis pulse
  - Located lateral to external hallucis longus tendon
- \* Assess lower limb sensation using a Monofilament
- \* Observe Gait
- \* Inspect patient's footwear
- \* Vibration Sensation using Tuning Fork
- \* Assess proprioception
  - Move big toe up and down
- \* Assess Ankle Jerk Reflex



Oxytocin  
 Mechanism of action Uses  
 Uses in obs  
 Complications

## Oxytocin

**Mechanism of action:**

- Acts through **oxytocin receptors** present in smooth muscles of myometrium.
- Stimulates the amniotic and decidual prostaglandin production.
- Mobilization of bound intracellular calcium from sarcoplasmic reticulum to activate the contractile protein.
- There is increase in frequency and force of uterine contractions, similar to physiological uterine contractions



## INDICATIONS

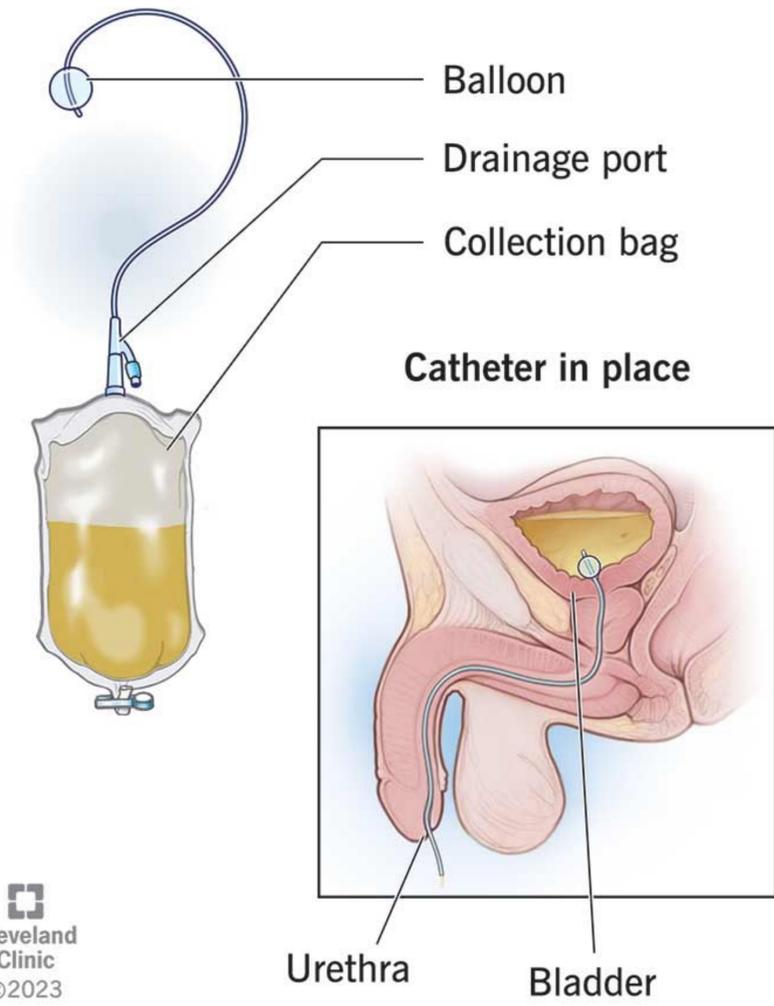
1. Induction of labour.
2. Augmentation of labour (when contractions are weak).
3. Active management of third stage of labour.
4. Prevention and treatment of postpartum hemorrhage (PPH).
5. Facilitation of uterine contraction after abortion or miscarriage.

Complications  
 of oxytocin –  
 Maternal.

- Uterine hyperstimulation
- Uterine rupture
- Water intoxication
- Hypotension
- Antidiuresis

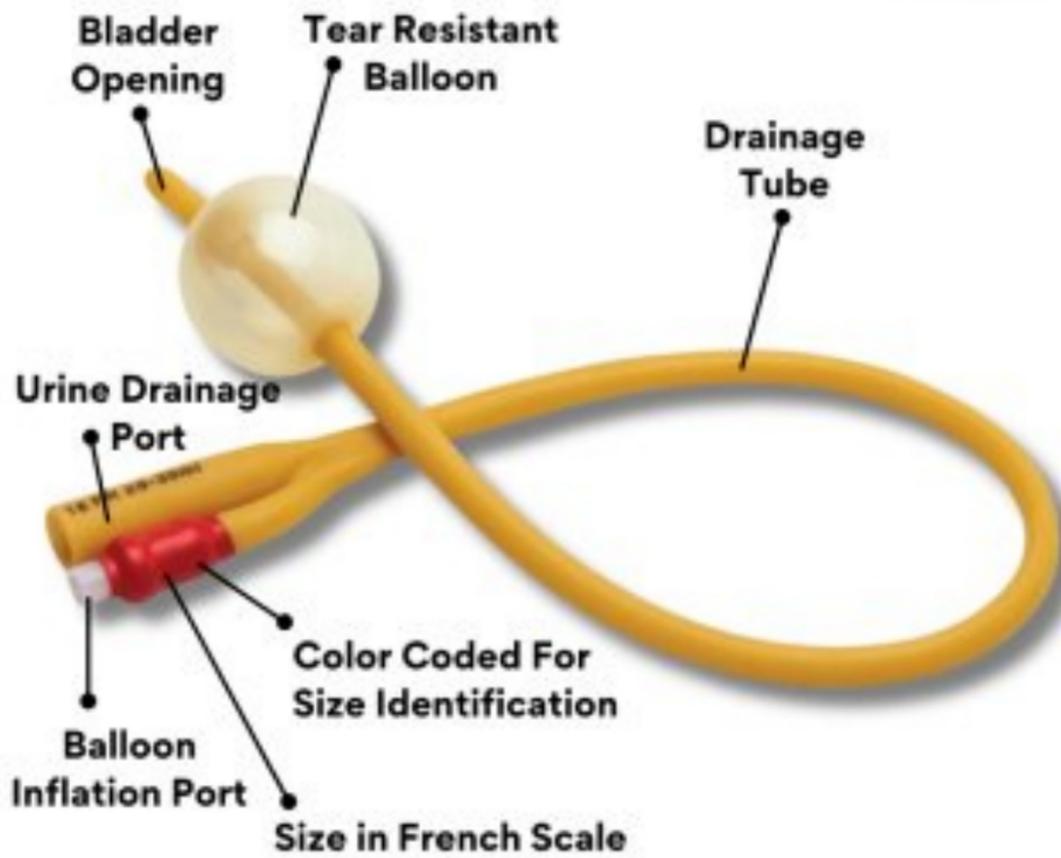
# Foley catheter

## Foley catheter



Cleveland  
Clinic  
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CARE<sup>xy</sup>  
Healthcare at home



Foley Catheter

A 12-year-old boy presented to the outdoors with increasing generalized body swelling and facial puffiness. On Examination, he has a BP of 110/60 mmHg and bilateral pitting oedema.

- Hb = 12 g/dL
- TLC = 9000
- Platelets = 320,000
- RBS= 120
- Urea =110 mg/dl
- Serum creatinine=1 mg /dl
- Chest X-ray = normal
- Urinalysis= Protein+++ , RBC nil.
- Echo= Normal
- HBsAg= Negative
- Anti-HCV= Negative
- Anti-HIV= Negative



QUESTIONS:

## Minimal Change Disease

1. What is the most probable diagnosis? (2)
2. Enlist at least two further investigations to be performed for confirmation of the diagnosis. (2)
3. Enlist at least two management options. (2)

### 2. Further Investigations for Confirmation (any 2)

1. **24-hour urine protein / spot urine protein/ creatinine ratio** → confirm **nephrotic-range proteinuria**
2. **Kidney biopsy** (if atypical features, steroid resistance, age <1 or >10, or hematuria) → usually **not needed initially in typical childhood MCD**

#### Optional / supportive investigations:

- Serum albumin (usually <2.5 g/dL)
- Lipid profile (hypercholesterolemia, hypertriglyceridemia)

### 3. Management Options (any 2)

#### A. General Measures

- **Edema management:** salt restriction, diuretics if severe
- **Infection prevention:** vaccinations, prompt treatment of infections

#### B. Specific Therapy

- **Corticosteroids (first-line):**
  - Prednisolone 60 mg/m<sup>2</sup>/day for 4–6 weeks, then taper
  - Most children respond (steroid-sensitive)

#### Other options (if steroid-resistant or frequent relapsers):

- Immunosuppressants: cyclophosphamide, levamisole, cyclosporine



## Acanthosis Nigricans

### QUESTIONS:

1. Identify the clinical sign. (2 marks)
2. Enlist any 2 diagnostic investigations that you will perform. (2 marks)
3. Write at least two causes.

### 1. Diagnostic Investigations (any 2)

1. **Fasting blood glucose / HbA1c** → to check for insulin resistance or diabetes
2. **Lipid profile** → often associated with **obesity** and **metabolic syndrome**

Optional: Serum insulin levels, endocrine workup if malignancy suspected

### 2. Causes of Acanthosis Nigricans (any 2)

1. **Obesity / Insulin resistance** (most common)
2. **Endocrine disorders** → e.g., **Type 2 diabetes**, **Cushing's syndrome**
3. **Malignancy-related** → especially **gastric adenocarcinoma** (less common)

## INSTRUCTION SHEET

- You have this patient who has been diagnosed with metabolic syndrome.
- His body mass index (BMI) is 35 kg/m<sup>2</sup> and his waist circumference is 130 cm.
- Your task is to counsel this patient with obesity for weight loss focusing on diet and physical activity.

## ذیابیطیس کے مریض کیلئے مثالی مینو

### خوراک اور مقدار

### وقت

1 کپ چائے + 1 انڈہ (ابلا ہوا) + 1/2 روٹی (بغیر چھتہ 90 گرام آٹا)



صبح کا ناشتہ

چائے یا مالٹا یا سیب یا امرود یا سلاڈ کی پلیٹ



ہلکی خوراک

1/2 روٹی 90 گرام + سلاڈ 1 پلیٹ + کچی ہوئی سبزی 1 پلیٹ



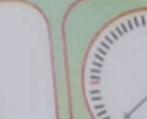
دوپہر کا کھانا

1 کپ چائے یا سلاڈ 1 پلیٹ + چٹا خشک 1 پیالی



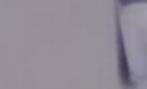
شام کی چائے

1/2 روٹی 90 گرام + سلاڈ 1 پلیٹ + کچی ہوئی دال / گوشت



رات کا کھانا

1 گلاس دودھ یا مالٹا یا سیب یا امرود



رات سونے سے پہلے



### DEPARTMENT OF DIABETES & ENDOCRINOLOGY

شعبہ امراض شوگر و غدود حیات آباد میڈیکل کمپلیکس پشاور  
ذیابٹیس، موٹاپا کے مریضوں کے لئے ضروری ہدایات

#### غذا جو زیا بطیس کے مریض احتیاط سے کھائیں

نوڈلز 1/2 پلٹ	پاستہ 1/2 پلٹ	آٹھائی 1/2 پلٹ	کئی 1/2 عدد	دلیہ 100 گرام	میسن 50 گرام	ایسے ہوئے چاول 1/2 پلٹ	کئی 1/2 روٹی 100 گرام	گندم (چکر) 1/2 روٹی 100 گرام
سیب 1 عدد	4 سے 2 عدد چیری	مارجرین کھن 50 گرام	پینیر 2 سے 4 ٹکڑے	چھلی 2 سے 3 ٹکڑے	بھرنی کشت 3 سے 4 ٹکڑے	انڈے کی سفیدی 2 عدد	چنا (شک) 1/2 پلٹ 100 گرام	امروہ 1 عدد
خرپوزہ 2 ٹکڑے	جاسن 10 سے 15 دانے	انار 1/2 عدد	آلوچہ 2 عدد	سٹرابری 2 سے 3 عدد	نربانی 2 عدد	مانا / کینو 1 عدد	آلو 1 عدد	کھلا 1/2 عدد
تیل میں طماہوا 1 عدد تیل کھاب	تیل میں سے ہونے 3 عدد پکڑے	انڈا 1 عدد	کھانے کا تیل 2 ٹچ	آلو 1 عدد	کپالو 1 عدد	شامچ 1 عدد	خرپوزہ 2 عدد	کھلا 1/2 عدد
کری دار سے 1 عدد تیل سے 1 عدد	سرسن کی اور 1 عدد	دلیسی 1 عدد	بنہ بالائی کا دودھ 1 عدد	سویٹز 8 سے 8 عدد	پیرا 1 عدد	سینڈوچ 1/2	گوشت کی کڑی 1/2 پلٹ	سیب کھاب 3 سے 5 عدد
لہسن 1 عدد	3 عدد	کھجور 1 عدد	تازہ انجیر 2 سے 3 عدد	سور 8 سے 8 عدد	چھولے 1 عدد	کول 1 عدد	دال لوبیہ 1 عدد	دال چنا 1 عدد

#### غذا جو زیا بطیس کے مریض نہیں کھا سکتے

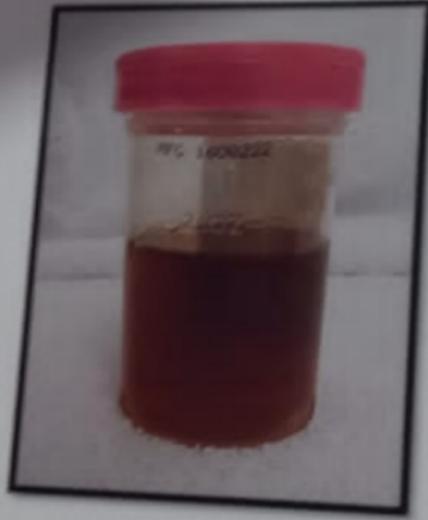
کیک	پیشری	مشائی	شہد	گڑ	شکر
چیونگم	آئس کریم	کولڈ ڈرنکس	شربت ملک شیک	پھلوں کے رس	ڈبل روٹی
ڈائٹ کولڈ ڈرنک	کشمش	میدہ	گاجر سوئی کا حلوہ	کھیر	فرنی
ڈائٹ میٹھائی	جیم	ڈیول مل پیک غذا	ڈائٹ جوس	کرلیے کاجوس	انجیر

#### غذا جو زیا بطیس کے مریض کھا سکتے ہیں

کدو توری	کرپلا	پھول	بند گوبھی	بیٹن	بھنڈی
ٹماٹر	شلہ	فریش بین	ہری	سلاڈ	مٹر
ادرک	کھیرا	گاجر	سوں پیاز	سلاڈ	سلاڈ
پودینا	ہری مرچ	ساگ	لیوں	سولی	سولی

سینٹر ڈائٹیشن شعبہ شوگر و غدود حیات آباد میڈیکل کمپلیکس پشاور

INTRODUCTION / RAPPORT	0.5	0.5	0.5	0.5	0.5	0.5		
ASSESS BACKGROUND KNOWLEDGE	0.5	0.5	0.5	0.5	0.5	0.5		
EXPLAIN THE RISKS ASSOCIATED WITH OBESITY	1	0.5	0.5	0	1	0.5		
ADVISE DIETARY MODIFICATIONS FOCUSING ON CALORIC AND CARBOHYDRATE RESTRICTION	2	<del>1.5</del> 1	1	1	1.5	1		
ADVISE PHYSICAL ACTIVITY	1	1	1	1	1	1		
ADDRESS PATIENT CONCERNS/QUERY	0.5	0.5	0.5	0.5	0.5	0.5		
THANKING THE PATIENT	0.5	0.5	0.5	0.5	0.5	0.5		
MARKS	6	4.5	4.5	4	5.5	4.5		



• An 11-Year-old boy presented to the outdoor with an increasing generalized body swelling and facial puffiness and dark color urine started 2 weeks after sore throat. On Examination he has B.P of 150/90 mmhg.

**QUESTIONS:**

1. Mention three **or** diagnostic test (3)
2. What is the most probable diagnosis (3)

CLASS YEAR: \_\_\_\_\_

1) \* ASO titer, Urinalysis  
\* CBC, ESR, CRP  
\* Biopsy.

2) Post streptococcal - GN.

## Paediatric station

Small months old child presented with nausea vomiting one episode of fits hyponatraemia hyperkalaemia and there was a picture of genitalia region what could you see in the picture? Ambiguous genitalia & undeserved testes in left

What would be the diagnosis (congenital adrenal hyperplasia )  
what investigation would you order



"An infant with vomiting, seizure, hyponatremia and hyperkalemia with ambiguous genitalia is most likely congenital adrenal hyperplasia due to 21-hydroxylase deficiency. The investigation of choice is serum 17-hydroxyprogesterone."

### ⚠ Why Hyponatremia + Hyperkalemia?

Due to:

- ↓ Aldosterone → salt wasting
- ↓ Cortisol
- ↑ ACTH → adrenal hyperplasia
- ↑ Androgens → virilization

### 🔬 Investigation to Order (Most Important)

👉 Serum 17-hydroxyprogesterone (Diagnostic test)

This will be markedly elevated.

### Repeat

Scenario of a child with polydipsia polyuria no ketones no pH abnormality non-diabetic and had a trauma and all of these symptoms have appeared after that trauma abnormal urine osmolality

diagnosis central diabetes insipidus

Causes any three (pituitary adenoma trauma infections haemorrhage ischaemia brain congenital)

Treatments three

(Desmopressin water intake increase salt restriction)

## Diagnosis

### Central diabetes insipidus

#### Why?

Head trauma → damage to posterior pituitary → ↓ ADH secretion → inability to concentrate urine → dilute urine + excessive urination

#### Key Investigation Finding

- ↓ Urine osmolality
- ↓ Urine specific gravity
- ↑ Serum osmolality
- ↑ Serum sodium
- Water deprivation test: urine remains dilute
- Responds to desmopressin (confirms central type)

#### Causes (Any Three)

1. Head trauma
2. Pituitary adenoma
3. CNS infections (meningitis, encephalitis)
4. Intracranial hemorrhage
5. Ischemia
6. Brain tumors (e.g., craniopharyngioma)
7. Congenital absence of ADH

#### Treatment (Any Three)

##### 1. Desmopressin (Drug of choice)

- Intranasal / oral / IV

##### 2. Adequate water intake

- Prevent dehydration

##### 3. Salt restriction

- Reduces urine output

Additional:

- Treat underlying cause
- Monitor electrolytes

## Exophthalmos

What investigations would you do?

What would be your probable diagnosis?

How will you treat this condition?

### Probable Diagnosis

Graves' disease

Leading to Graves' ophthalmopathy



### 🔍 Investigations

#### 1 Thyroid Function Tests (First line)

- ↓ TSH
- ↑ Free T3
- ↑ Free T4

#### 2 Thyroid Antibodies

- TSH receptor antibodies (TRAb)
- Anti-TPO antibodies

#### 3 Imaging

- CT orbit → Enlarged extraocular muscles (muscle belly enlarged, tendon spared)
- MRI orbit (if optic nerve compression suspected)

#### 4 Eye Assessment

- Visual acuity
- Intraocular pressure
- Fundoscopy
- Exophthalmometry (to measure degree of proptosis)

### 💊 Treatment

Management depends on severity.

#### ◆ 1. Treat Hyperthyroidism

- Antithyroid drugs (Carbimazole / Methimazole)
- Beta blockers (e.g., Propranolol)
- Radioiodine (caution: may worsen eye disease)
- Thyroidectomy (in selected cases)

#### ◆ 2. Treat Eye Disease

Mild:

- Artificial tears
- Lubricating ointment
- Elevate head during sleep
- Stop smoking (very important)

Moderate–Severe:

- IV steroids (Methylprednisolone)
- Orbital radiotherapy

Sight-threatening:

- Urgent IV steroids
- Orbital decompression surgery

## 📌 Clinical Scenario

Elderly woman with sudden bilateral flank pain → CT renal report shows large stones in both kidneys

## 📄 Interpretation of CT Scan (Renal CT KUB)

Typical findings would include:

Hyperdense calculi in both renal pelvicalyceal systems

Stones likely >2 cm in size

## 🔍 Possible:

Hydronephrosis (if obstruction present)

Dilated calyces

Perinephric fat stranding (if infection/inflammation)

If stones are occupying most of the renal pelvis → think staghorn calculi



## 🩺 Diagnosis

Bilateral large renal calculi

(If branching and filling pelvis → Bilateral staghorn calculi)

## 🏥 Management

Management depends mainly on stone size, location, obstruction, renal function, and infection.

### 1 First stabilize patient

Pain control (NSAIDs like diclofenac)

IV fluids

Check renal function (Urea, Creatinine)

Urine analysis & culture

If infection + obstruction → Emergency decompression (DJ stent / PCN)

### 2 Definitive Management

Since stones are large (>2 cm) and bilateral:

◆ First-line: Percutaneous Nephrolithotomy (PCNL)

✓ Treatment of choice for stones >2 cm

✓ Also best for staghorn calculi

✓ Minimally invasive

✓ High stone clearance rate



Images identification of

testicular torsion

Grade 3 varicose

Grade 3 haematoma around the kidney

Renal tumour of the lower pole of right kidney in a solitary  
functioning kidney (there was no kidney on the left side in the image)

Penile fracture

Cushing syndrome there is excess of glucocorticoids, leading to central obesity, moon shaped greasy face with facial hairs, diabetes, proximal myopathy,, pink stria & **secondary hypertension**.



## Cushing syndrome

Two pictures, one of **moon faces** and other of **abdominal striae**

1 write the findings of the pictures

2 write the diagnosis

3 write four investigations

4 causes 2



### 3 Four Investigations

In exams, they want screening tests first.

#### ◆ Initial Screening Tests (Any 2-3 of these)

1. 24-hour urinary free cortisol
2. Low-dose dexamethasone suppression test
3. Late-night salivary cortisol
4. Serum cortisol level

#### ◆ To Find the Cause

5. Plasma ACTH level
6. CT scan of adrenals
7. MRI of pituitary

(Write any four total – usually 2 screening + 2 etiological = safe answer)

### 4 Two Causes

- ◆ 1. Exogenous steroids (MOST COMMON overall cause)
  - Long-term corticosteroid therapy
- ◆ 2. Endogenous causes:
  - Cushing disease (pituitary ACTH-secreting adenoma)
  - Adrenal adenoma
  - Ectopic ACTH production (e.g., small cell lung carcinoma)

station of sutures

Name some types of sutures

On the station, there were needle holder plane forceps catgut suture and a silk suture and a suture pad gloves

Why cat gut is not used now (cause this bovine spongiform encephalopathy)

What is catgut derived from? sheep intestine

Then show how to hold a needle holder and forceps and how to grab the suture with them



## Needle Holder



### 1. Types of Sutures (Exam Answer)

You can classify sutures as:

#### A. Based on Absorbability

**Absorbable:**

- Plain catgut
- Chromic catgut
- Vicryl (polyglactin 910)
- Monocryl (poliglecaprone)
- PDS (polydioxanone)

**Non-absorbable:**

- Silk
- Nylon
- Prolene (polypropylene)
- Polyester
- Stainless steel

### 2. About Catgut (Very Common Viva Question)

? Is catgut used nowadays?

- Rarely used now.
- Largely replaced by synthetic absorbable sutures (e.g., Vicryl).
- Risk concerns included disease transmission (like bovine spongiform encephalopathy), plus:
  - Unpredictable absorption
  - More tissue reaction

? What is catgut derived from?

- Submucosa of sheep intestine
- Or bovine intestine

👉 Important viva line:

"Catgut is a natural absorbable suture derived from sheep intestinal submucosa."



Examining patient for ascites pedal edema and kidney palpation

Obstetrics 3

Council a patient of 40 years having a 16 week size fibroid in the uterus for hysterectomy

Is there any other management? no because the size is big

Can the surgery be performed vaginally? normally can be performed but in this case again it is big fibroid so no.

Explain the whole procedure why it is needed what could be the complications if she does not

Could be there any, could there be any complications after surgery?

So bleeding infection and in long-term menopausal symptoms

---

#### Obstetrics 4

Perform breech vaginal delivery

Types of breech

Modes of delivery for breech

Two maternal and two fetal causes of breech

Incidence of breech (3 -5%)

#### Obstetrics 5

Shoulder dystocia scenario

Diagnose

For manoeuvres that are performed for it

Tell all the management

The two invasive methods that are used ( cleidotomy  
symphysiotomy )

What would be the management for her the next time her  
baby is macrosomic?

(do not attempt VD go for elective CS)

#### Obstetric 6

Define PPRM

Complications of PPRM for mother and fetus

Preterm baby will have low birth weight what is the main  
consequence of this (hypothermia due to less fat pads and  
hypoglycemia )

Percentage incident of PPRM

Causes of PPRM 3%

#### Obstetrics 7

40 weeks POG Pregnant female comes with generalised tonic  
clonic seizure

Diagnosis eclampsia

Management

Shift to ICU

ABC

MGSO<sub>4</sub> &/or diazepam

Definitive treatment would be to deliver the fetus

---

## Obstetrics 8

Female with the one years of sub fertility hair on the face amenorrhea

Diagnosis

Medical management for conception

Surgical management for concept

Long-term consequences

What test would you want to perform?

## Repeat

### Obstetrics 9

Vacuum

Identify

Three indications

Maternal and fetal

complications 2 each

### Obstetrics 10

Female with six weeks amenorrhea pain abdominal but there is no signs of pregnancy pregnancy test is negative

Scenario of ectopic pregnancy

Risk factors of ectopic pregnancy

Medical management of ectopic

Surgical management of ectopic

And what is used to monitor the progress?

## Obese wala counselling

"Your BMI and waist circumference are higher than recommended. This increases the risk of:

- Type 2 diabetes
- High blood pressure
- Heart disease
- Stroke
- Joint problems

The good news is that even 5–10% weight loss can significantly reduce these risks."

### 1 Diet Advice

#### Goal:

Create a calorie deficit (reduce 500–750 kcal/day)

#### A. General Principles

Eat 3 main meals + 1–2 healthy snacks

Avoid skipping meals

Reduce portion size

Eat slowly (20 minutes per meal)

Avoid late-night eating

#### B. What to Reduce

Fried foods (samosa, pakora, fries)

Sugary drinks (colas, juices)

Bakery items (cakes, biscuits)

White rice in large amounts

Parathas with excess oil/ghee

#### C. What to Increase

Vegetables (half plate rule)

Whole grains (brown roti, brown rice)

Lean protein (dal, chicken, fish, eggs)

Fruits (1–2 portions/day)

Water (2–3 liters daily)

#### D. Plate Method (Easy Rule)

½ plate → Vegetables

¼ plate → Protein

¼ plate → Whole grains

¼ plate → Whole grains

### 2 Exercise Advice

#### Minimum Recommendation:

 150–300 minutes/week moderate exercise

#### A. Beginners

Brisk walking 30 minutes/day, 5 days/week

Start with 10–15 minutes and gradually increase

#### B. Add Strength Training

2–3 times/week

Bodyweight exercises:

Squats

Wall push-ups

Lunges

Planks

#### C. Increase Daily Activity

Take stairs

Park farther away

Avoid prolonged sitting

8,000–10,000 steps/day goal

### 3 Behavioral Modifications

Keep a food diary

Avoid emotional eating

Sleep 7–8 hours

Manage stress

Avoid crash dieting

### 4 Waist Circumference Targets

Men: < 90 cm (South Asians)

Women: < 80 cm

Abdominal obesity increases heart risk more than BMI alone.

### 5 When to Consider Medication?

If:

BMI ≥ 30

OR

BMI ≥ 27 with comorbidities

Medications may be considered along with lifestyle changes.

### 6 Bariatric Surgery (If Severe)

Consider if:

BMI ≥ 40

OR

BMI ≥ 35 with diabetes/hypertension

## Types of Sutures

- ◆ Based on Absorbability

### Absorbable

Catgut (plain, chromic)

Vicryl (polyglactin 910)

Monocryl

PDS

### Non-absorbable

Silk

Nylon (Ethilon)

Prolene (polypropylene)

Polyester

- ◆ Based on Structure

Monofilament → Nylon, Prolene

Multifilament (braided) → Silk, Vicryl

## 2 Why is Catgut Not Used Now?

Main reasons:

✗ Risk of transmission of prion diseases

e.g., Bovine spongiform encephalopathy

✗ Unpredictable absorption

✗ More tissue reaction

✗ Lower tensile strength

Now we prefer synthetic absorbable sutures (e.g., Vicryl).

## 3 What is Catgut Derived From?

👉 Submucosa of sheep small intestine  
(or sometimes bovine intestine)

## Obstetrics 2

### Copper IUCD

#### Identify

#### Mechanism of action

#### Two indications

#### Two complications

#### Two contraindications



#### Mechanism of Action

- ◆ Copper ions cause spermicidal effect (toxic to sperm).
- ◆ Causes sterile inflammatory reaction in endometrium → prevents fertilization.
- ◆ May prevent implantation (secondary effect).

👉 Main action = Prevents fertilization

#### 3 Two Indications

Long-term reversible contraception

Emergency contraception (within 5 days of unprotected intercourse)

#### 4 Two Complications

Menorrhagia (heavy menstrual bleeding)

Uterine perforation

(Other possible: pelvic infection, expulsion)

#### 5 Two Contraindications

Pregnancy

Active pelvic inflammatory disease (PID)

(Also: unexplained vaginal bleeding, uterine anomaly)

## Obstetrics 1

Female with heavy regular bleeding for past few years

What is the new name for this? (Heavy menstrual bleeding) old is menorrhagia

How will you medically manage this?

How will you surgically manage this?

## Menstrual bleeding

### What is the New Name?

👉 Heavy Menstrual Bleeding (HMB)

Old term: Menorrhagia

### Definition:

Excessive menstrual blood loss that interferes with physical, social, emotional, or material quality of life.

## Medical Management of Heavy Menstrual Bleeding

(If patient is stable and no structural cause needing surgery)

### ◆ A. First-Line (Very Important)

#### 1 Tranexamic Acid

Taken during menses

Reduces blood loss by ~40–50%

#### 2 NSAIDs (e.g., mefenamic acid)

Reduce prostaglandins

Also relieve pain

### ◆ B. Hormonal Treatment

#### 3 Combined Oral Contraceptive Pills (COCP)

#### 4 Oral Progesterone

(e.g., norethisterone in luteal phase)

#### 5 Levonorgestrel intrauterine system (Mirena)

★ Most effective medical option

Reduces bleeding up to 90%

### 3 Surgical Management

(If medical treatment fails or structural cause present)

### ◆ A. Conservative Surgery

#### 1 Endometrial ablation

Destroys endometrial lining

For women who completed family

### ◆ B. Definitive Surgery

#### 2 Hysterectomy

Permanent cure

For severe refractory cases

If fibroid-related:

Myomectomy

Uterine artery embolization

## Counselling hysterectomy

### Introduction & Rapport

“Assalam o Alaikum. I am Dr \_\_\_\_\_. I understand you have been diagnosed with a large fibroid in your uterus. I would like to explain your condition and discuss treatment options with you. Please feel free to stop me anytime.”

### 2 Explain the Condition (Simple Language)

“You have a fibroid, which is a non-cancerous growth in the muscle of the uterus.

Your fibroid is about the size of a 16-week pregnancy, which means it is quite large. That is likely causing your symptoms such as:

Heavy bleeding

Abdominal swelling

Pelvic pressure

Pain”

Reassure: “Fibroids are benign and not cancer.”

### 3 Why Surgery is Recommended

“Because of the large size and your symptoms, medical treatment is unlikely to shrink it sufficiently. The most definitive treatment is removal of the uterus, called hysterectomy.”

### 4 What is Hysterectomy?

“It is a surgery to remove the uterus. After this:

You will not have periods

You cannot become pregnant

Your ovaries may or may not be removed depending on your condition”

(At 40 years, usually ovaries are preserved unless indicated.)

### 5 Benefits

Permanent relief from heavy bleeding

Relief from pressure symptoms

No recurrence of fibroid

Improved quality of life

### 6 Risks (Must Mention in OSCE)

Bleeding

Infection

Injury to bladder or bowel

Anesthesia risks

Blood clots

Early menopause (if ovaries removed)

### 7 Alternatives

Myomectomy (removal of fibroid only)

Uterine artery embolization

Hormonal treatment (temporary relief)

But explain: “Because your fibroid is large and you are 40 years old, hysterectomy is often the most definitive option.”

### 8 Postoperative Information

Hospital stay: 2–4 days

Recovery: 4–6 weeks

Avoid heavy lifting

Follow-up visit required

### 9 Emotional Support

“I understand this is a big decision, especially because it involves removal of the uterus. If you would like, you can discuss this with your family. I am here to answer any questions.”

### 10 Check Understanding

“Do you have any concerns or questions?”

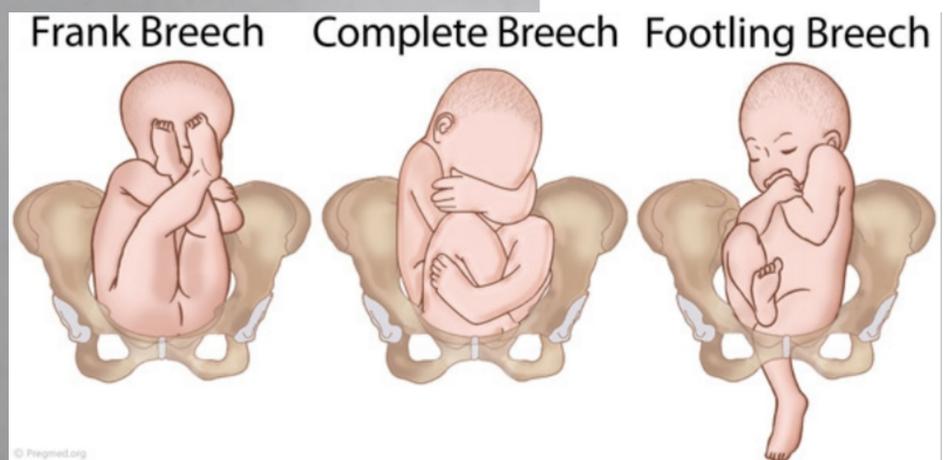
# Breech types mode of delivery and risk factors

- Extended Breech:
  - Also known as frank breech, is most common (70%).
  - Thighs are flexed and legs are extended.
- Flexed Breech:
  - Also known as complete breech, accounts for 20%.
  - Thighs and legs are flexed.
- Footling Breech:
  - It is the least common, and predisposes to cord and foot prolapse.
  - One leg is flexed and one extended.

## Risks Factors & Diagnosis:

### Risk Factors:

- Maternal Factors:
  - Fibroids
  - Uterine abnormalities (*bicornuate uterus*)
  - Oligohydramnios
  - Polyhydramnios
  - uterine surgery
- Fetal Factors:
  - Multiple gestation
  - Anencephaly
  - Hydrocephalus
  - Neuromuscular condition
  - prematurity - placenta previa



## iv). Mode of Delivery:

- Factors that increase the likelihood of C-section:
  - Large or small baby
  - Small pelvis on pelvimetry
  - Primigravida
  - Previous C-section
  - Extended neck
- Factors that increase the likelihood of Vaginal delivery:
  - Normal-size baby (2.5-3.5 kg)
  - Good pelvimetry
  - Flexed neck
  - Multiparous
  - Breech deeply engaged

*pre requ*

*managen*

# Shoulder Dystocia

## (iii). Management:

- The mnemonic "**HELPERR**" has been suggested to aid in remembering the sequence.
  - The main objectives are to facilitate the entry of anterior (or posterior) shoulder into the pelvis and to ensure rotation of the shoulders to the larger oblique or transverse diameter of the pelvis.
- **H** – Call for help.
  - **E** – Episiotomy (consider episiotomy as it may help with internal maneuvers).
  - **L** – Legs into **McRoberts Position** i.e. hyperflexed at the hips with thighs abducted & externally rotated – this flattens the lumbosacral spine.
  - **P** – Suprapubic pressure applied to the posterior aspect of the anterior shoulder to dislodge it from under the pubic symphysis.
  - **E** – Enter pelvis for internal maneuvers, which include:
    - Pressure exerted on the posterior aspect of "**anterior**" shoulder to adduct and rotate the shoulders to the larger oblique diameter (**Rubin II**).
    - If this fails combine it with pressure on the anterior aspect of the "**posterior**" shoulder (**Woods' screw**).
    - If this fails, reversing the maneuver may be tried with pressure on anterior aspect of anterior shoulder and posterior aspect of posterior shoulder in the opposite direction (**reverse Woods' screw**).
  - **R** – Release of posterior arm by flexing the elbow, getting hold of the fetal hand, and sweeping the fetal arm across the chest and face to release the posterior shoulder.
  - **R** – Roll over to all fours may help aid delivery by the changes brought about in the pelvic dimensions (**Gaskin maneuver**).
  - Finally consider "**Zavanelli Maneuvers**" – it is a series of steps that pushes the fetal head back into the pelvis, followed by C-section:
    - Give uterine relaxation – terbutaline (subcutaneously), nitroglycerine (IV)
    - Place a fetal scalp electrode.
    - Rotate the head back into occiput anterior position (reverse of restitution).
    - Flex the head & push it cephalad as much as possible.
    - Once cephalad replacement is successful, patient is prepared for C-section.

## **Link on Koracademy.com**

<https://koracademy.com/ospes-final-year-kgmc/>

### BLOCK P EXAMINATIONS

- Obstetrical examination ([videolink](#))
- Thyroid examination ([videolink](#))
- Diabetic foot examination ([videolink](#)) ([videolink](#))
- Shoulder dystocia maneuvers ([videolink](#))
- Breech delivery maneuvers ([videolink](#))
- Breast examination ([videolink](#))
- Forceps delivery demonstration ([videolink](#))

Pprom :preterm prelabour rupture of membranes

Leakage of amniotic fluid in absence of uterine activity occurring between 24 to 36+6 weeks of gestation

## 2 Complications of PPRM

### 👩 Maternal Complications

1. Chorioamnionitis
2. Endometritis
3. Sepsis
4. Placental abruption

### 👶 Fetal / Neonatal Complications

1. Prematurity
2. Respiratory distress syndrome (RDS)
3. Neonatal sepsis
4. Cord prolapse
5. Pulmonary hypoplasia (if early PPRM)
6. Intraventricular hemorrhage

## 5 Causes of PPRM

Common causes:

- 1 Genital tract infection (most common)
- 2 Previous history of PPRM
- 3 Overdistension of uterus

- Twins
- Polyhydramnios
- 4 Cervical incompetence
- 5 Smoking
- 6 Trauma

Obstetric 6

Define PPRM

Complications of PPRM for mother and fetus

Preterm baby will have low birth weight what is the main consequence of this (hypothermia due to less fat pads and hypoglycemia )

Percentage incident of PPRM

Causes of PPRM 3%

## 3 Preterm Baby → Low Birth Weight

Main Consequences?

### ★ 1. Hypothermia

- Due to ↓ subcutaneous fat
- Large surface area to body mass ratio

### ★ 2. Hypoglycemia

- Low glycogen stores
- Poor feeding

(These are most important viva points)

## 4 Percentage Incidence of PPRM

- Occurs in about **3% of all pregnancies**
- Accounts for ~30–40% of preterm births



Ventouse Cup



(iii). Indications & Contraindications:

• Indications:

- Delay in the 2<sup>nd</sup> stage of labour.
- Fetal distress in the 2<sup>nd</sup> stage.
- Maternal conditions requiring a short 2<sup>nd</sup> stage.
  - Cardiac disorders
  - Respiratory disorders

• Contraindications:

- Face presentation
- Breech presentation
- Gestation <34 weeks increased risk of Cephalhematoma, Intracranial Bleeding
- Gestation 35-36 weeks is relative contraindication.

- Marked bleeding from fetal blood sampling site.
- Head not fully engaged.
- Cervix not fully dilated.

(iv). Complications:

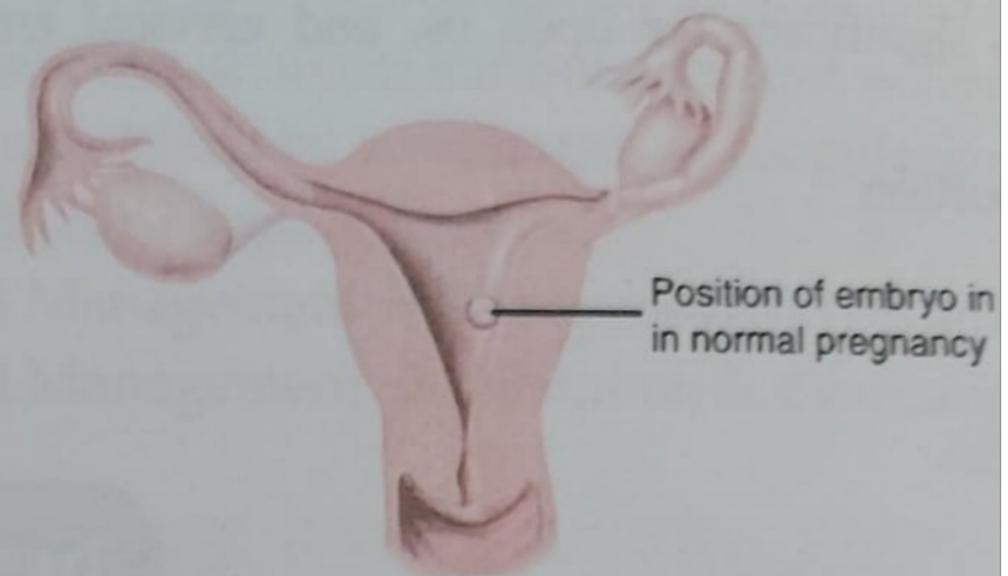
▪ Maternal:

- Genital tract trauma (most common)
- Hemorrhage from unrecognized cervical injury.

▪ Fetal:

- Chignon (edematous skin bump) at the site of cup application
- Cephalhematoma (subperiosteal bleed).
- Subgaleal hematoma
- Intracranial hemorrhage
- Retinal hemorrhage

# Ectopic pregnancy



Ectopic Pregnancy

## II. Risk Factors & Differential Diagnosis:

- Risk Factors:
  - Previous PID (most common)
  - Previous ectopic pregnancy
  - Previous tubal surgery
  - Intrauterine device in place
  - Prolonged infertility
  
- Differential Diagnosis:
  - Acute appendicitis
  - Diverticulitis
  - Threatened abortion
  - Molar pregnancy
  - Ruptured corpus luteum

## Ectopic pregnancy

### What is Used to Monitor Progress?

👉 Serial serum  $\beta$ -hCG levels

Check on day 4 and day 7 after methotrexate

Expect  $\geq 15\%$  drop

Then weekly until negative

Also follow-up ultrasound if needed.

## V. Management:

### (i). Medical Management:

- It should be considered when following criteria are met:
  - Clinically stable
  - $\beta$ -hCG is  $< 3000$  IU/L
  - Ectopic pregnancy is  $< 4$  cm and no fetal cardiac activity on TVS.
  - No hemoperitoneum on TVS
  - Live in close proximity to the hospital (due to need for regular follow-ups)
- **Methotrexate:**
  - **It is the agent of choice for medical management of ectopic pregnancy.**
  - It is a folic acid antagonist and given intramuscularly as a single dose.
  - $\beta$ -hCG should be checked on days 4, 7, 11, and then weekly until undetectable.
  - $\beta$ -hCG should drop by 15% between day 4 & 7.
  - Contraindications:
    - Chronic liver disease
    - Chronic kidney disease
    - Active infection
    - Immunodeficiency & hematologic disorder
    - Breastfeeding
  - Follow-up:
    - Avoid sexual intercourse during treatment with methotrexate.
    - Avoid conceiving for at least 3 months after methotrexate therapy (risk of teratogenicity)

### (ii). Surgical Management:

- Unstable (ruptured)  $\rightarrow$  laparotomy & salpingectomy (removal of tube)
- Stable (Un-ruptured):
  - Laparoscopy and salpingectomy – treatment of choice.
  - Salpingotomy (i.e. opening the tube and excision of the ectopic) is an option if the patient has only one fallopian tube.



### Clinical Pearl

- A 25-year old female with 7-weeks of gestational amenorrhea presents with vaginal spotting. She is hemodynamically stable. Abdominal examination reveals mild tenderness in RLQ. Pelvic examination shows closed os with no tenderness. TVUS shows no intra-uterine gestational sac and no adnexal masses. Serum Beta-hCG is positive (2500 mIU/mL).
- Diagnosis: Suspected ectopic pregnancy. Patient should undergo Laparoscopy. **(Elevated beta-hCG  $> 2000$  with no intra-uterine gestational sac is suspicious for ectopic, even if US doesn't show any adnexal mass).**

1. CTG graph read
2. \*Normal BHR, Reduced variability, No acceleration, No deceleration
3. Fetal hypoxia
4. Change maternal position to left lateral tilt , iv fluids

3. Viva: what's hyperthyroidism, levels of t3 t4 tsh in it. What's multinodular goiter. Are nodules solid or Cystic. Can it be malignant. Tsh high but t3 t4 normal what's it called?? Subclinical hypothyroidism baby. T4 concentration near the thyroid. What cells are making the actual t3. And what gland makes the t3 and what gland makes the tsh.

## Hyperthyroidism

Definition:

A condition in which there is excess thyroid hormone production, leading to increased metabolic activity.

Lab Findings:

Hormone

Expected in Hyperthyroidism

T3 ↑ Elevated

T4 ↑ Elevated

TSH ↓ Suppressed (low)

Example: Graves' disease, Toxic multinodular goiter

## 2 Multinodular Goiter (MNG)

Definition:

Enlarged thyroid with multiple nodules, usually heterogeneous.

Features of nodules:

Can be solid or cystic

Usually benign, but small risk of malignancy (~5%)

"Hot" nodules → functioning (hyperthyroid)

"Cold" nodules → non-functioning (higher risk of malignancy)

## 3 TSH High, T3/T4 Normal

✓ This is called: Subclinical hypothyroidism

Patient usually asymptomatic

Only lab abnormality: high TSH, normal free T4 and T3

## 4 Thyroid Hormone Production

- ◆ T4 and T3 Production

T4 (thyroxine) → main hormone secreted by thyroid gland

T3 (triiodothyronine) → mostly produced by peripheral conversion of T4 in liver, kidney, and other tissues

~20% of T3 is secreted directly by thyroid follicular cells

- ◆ Cells in Thyroid

Follicular cells → produce T4 and T3

Parafollicular (C) cells → produce calcitonin, not T3/T4

## 5 Glands Making the Hormones

Hormone

Gland

T3 & T4

Thyroid gland (follicular cells)

TSH

Anterior pituitary (thyrotrophs)

## Block P:

1. Counselling patient about CKD and he is unwilling for dialysis.

Questions asked were: what happens to me if I don't do dialysis and what are the alternatives to haemodialysis? What's the entire procedure. Two ways of it; fistula and central line What are the cost associated(5\_8k per dialysis session and 3

2\_3 times a week depends patient to patient)

## Counseling CKD Patient About Dialysis

### 1 Introduction

Greet the patient and establish rapport:

“Assalam-o-Alaikum. I understand you have chronic kidney disease and you are concerned about starting dialysis. I would like to explain your condition, the procedure, alternatives, and what may happen if you don't start dialysis.”

Ensure privacy and allow patient to express fears.

### 2 Explain CKD and Need for Dialysis

CKD → kidneys lose their function gradually.

Dialysis is needed when kidneys can no longer remove toxins, excess fluid, and waste from the blood.

Without dialysis:

Fluid overload → swelling, shortness of breath

High potassium → heart rhythm problems

Waste accumulation → nausea, fatigue, confusion

Eventually → life-threatening complications

Use simple terms, avoid medical jargon.

### 3 Explain Haemodialysis Procedure

Haemodialysis removes toxins and excess fluid using a machine:

Access: Blood is taken from your body, passed through a dialyzer (artificial kidney), and returned.

Session duration: ~3–4 hours per session

Frequency: Usually 2–3 times per week

#### ♦ Two Types of Vascular Access

#### Arteriovenous Fistula (AV Fistula)

Surgical connection of artery and vein in arm

Long-term use

Fewer complications (infection, clotting)

#### Central Venous Catheter / Line

Tube inserted in neck, chest, or groin vein

Short-term or urgent use

Higher risk of infection

### 4 Alternatives to Haemodialysis

Peritoneal dialysis (using abdomen lining to filter blood)

Kidney transplant (ideal, but depends on donor availability)

Conservative management (only supportive care)

Control blood pressure, diet, medications

This is not curative; disease will progress

### 5 Cost of Haemodialysis (Pakistan context)

Each session: 5,000–8,000 PKR

Frequency: 2–3 times per week

Depends on patient and center

## Recurrent Calcium Oxalate Stones – Dietary Modification

### Key Principles

Goal: Reduce stone formation without compromising nutrition

### Dietary Advice

#### Nutrient

#### Recommendation

#### Reason

#### Calcium

Normal dietary calcium (1,000–1,200 mg/day)

Binds oxalate in gut → reduces absorption

#### Oxalate

Limit high-oxalate foods (spinach, rhubarb, nuts, tea)

↓ urinary oxalate

#### Protein

Moderate animal protein

Excess protein → ↑ uric acid & calcium excretion

#### Salt

Low sodium (<2 g/day)

High sodium ↑ calcium excretion

#### Fluids

2–3 L water/day

Dilutes urine → prevents crystallization

#### Citrate

Lemonade, citrus fruits

Citrate inhibits stone formation

#### Additional Tips

Avoid excessive vitamin C supplementation

Avoid crash diets or high-protein diets

## Bladder Carcinoma

### Risk Factors

Smoking (most important)

Chronic irritation (e.g., catheter, stones)

Occupational exposure (aromatic amines, dyes, rubber industry)

Schistosomiasis (in endemic areas)

### Investigations

Urine cytology

Cystoscopy with biopsy (gold standard)

Imaging: CT urography / Ultrasound

Lab tests: CBC, renal function

### Treatment

#### Non-muscle-invasive (Ta, T1)

TURBT (transurethral resection of bladder tumor)

Intravesical therapy: BCG, Mitomycin C

#### Muscle-invasive

Radical cystectomy + urinary diversion

+/- Chemotherapy (neoadjuvant/adjuvant)

### Follow-up

Regular cystoscopy for recurrence

## Molar Pregnancy (Hydatidiform Mole)

### Types

#### Complete mole

Fertilization of empty egg by 1 or 2 sperm

No fetal tissue

High risk of malignancy (~15–20%)

#### Partial mole

2 sperm fertilize normal egg → triploid

Some fetal tissue

Lower risk of malignancy (~1–5%)

### Treatment

Suction & curettage (uterine evacuation)

Rh immunoglobulin if Rh-negative

Avoid pregnancy for 6–12 months

### Follow-up

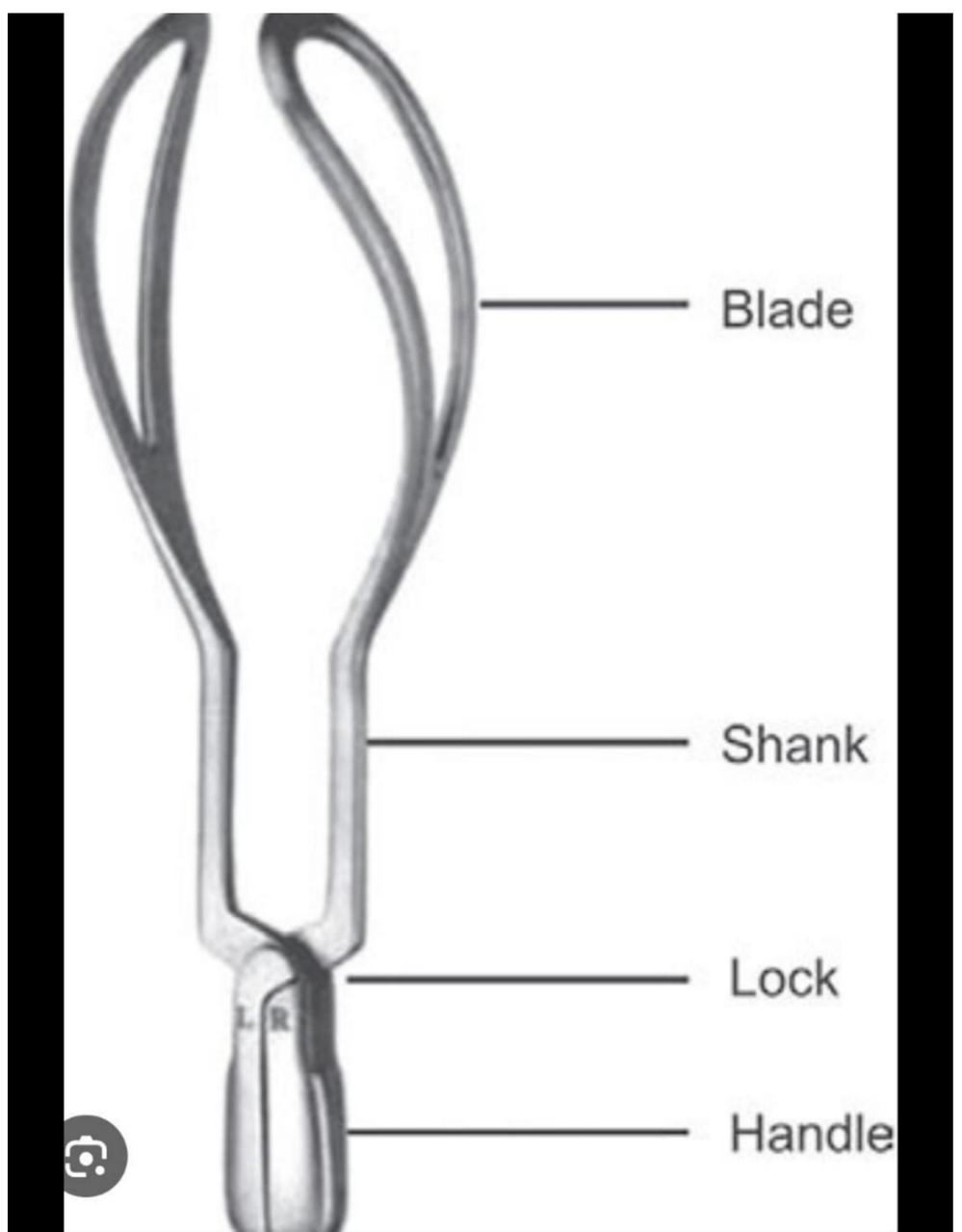
Serial  $\beta$ -hCG levels weekly until undetectable

Monthly  $\beta$ -hCG for 6 months

Monitor for gestational trophoblastic neoplasia

Contraception advised during follow-up

## Wrigley Forceps



Short obstetric forceps  
Used for low or outlet deliveries  
Blades: slightly curved  
Shorter than standard Simpson or Elliot forceps

### Indications

Assisted vaginal delivery:  
Prolonged second stage of labor  
Maternal exhaustion  
Fetal distress (if head at +2 or +3 station)

### Pre-requisites

Fully dilated cervix  
Ruptured membranes  
Analgesia/epidural  
Vertex presentation  
No cephalopelvic disproportion

### Complications

Maternal: vaginal/cervical tears, perineal trauma, hematoma  
Fetal: scalp injuries, cephalohematoma, facial nerve injury

MgSO<sub>4</sub> (Magnesium Sulphate)

#### Identification / Use

Anticonvulsant for eclampsia prevention and treatment

#### Dosage (example)

Loading: 4–6 g IV over 15–20 min

Maintenance: 1 g/hour IV or 5 g IM every 4 h

#### Antidote

Calcium gluconate 10% (1 g IV slow)

#### Side Effects / Toxicity Signs

Loss of deep tendon reflexes

Respiratory depression

Hypotension

Flushing, nausea

## UTI in Pregnancy – Scenario/Urine Report

### Identification

Urine: WBCs ↑, nitrite +, bacteria on culture

### Treatment

Safe antibiotics in pregnancy:

Nitrofurantoin (except 3rd trimester)

Amoxicillin / Amoxicillin-Clavulanate

Cephalexin

**Duration:** Usually 5–7 days

### Complications if Untreated

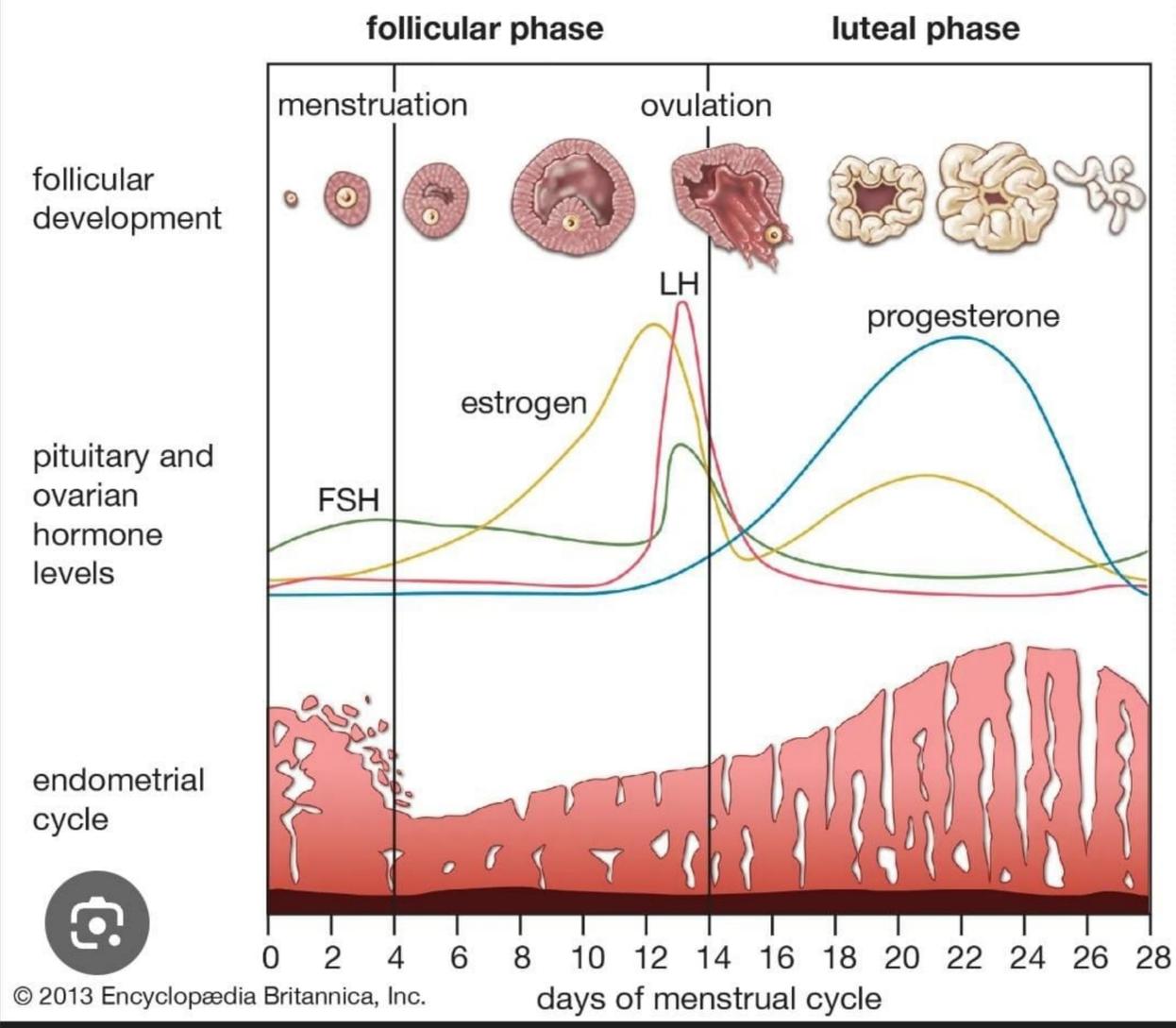
Pyelonephritis

Preterm labor

Low birth weight

Sepsis

## The menstrual cycle



### Menstrual Cycle Hormones Graph

Hormones to plot

FSH → rises early in follicular phase, small mid-cycle peak

LH → small rise follicular, LH surge mid-cycle triggers ovulation

Estrogen → rises follicular, peaks before ovulation, mid-luteal secondary peak

Progesterone → low follicular, rises luteal phase

GnRH → pulsatile, drives FSH/LH

Phases

Follicular (Days 1–14) → FSH ↑ → follicle maturation → estrogen ↑

Ovulation (~Day 14) → LH surge → ovulation

Luteal (Days 15–28) → corpus luteum → progesterone ↑, moderate estrogen

Menstruation → hormone drop if no pregnancy

# 1 2 Mentoanterior and Other Presentations

## Definitions & Diameters

Presentation	Fetal Head Orientation	Pelvic Diameter
Mentoanterior (MA)	Face anterior, chin toward pubis	Submentobregmatic 9.5 cm
Mentoposterior (MP)	Face posterior, chin toward sacrum	Submentobregmatic 9.5 cm
Brow presentation	Forehead leads	Mentofrontal ~13.5 cm
Face presentation (general)	Chin anterior or posterior	Submentobregmatic (9.5 cm)
Vertex / Occiput anterior	Head flexed, occiput leading	Occipitofrontal ~11.5 cm

## Diabetes Insipidus (DI)

### Definition:

Excessive urination (polyuria) and thirst (polydipsia) due to inability to concentrate urine.

### Causes

#### A. Central DI (ADH deficiency)

Idiopathic

Head trauma / neurosurgery

Tumors (pituitary, hypothalamic)

Infections (meningitis)

#### B. Nephrogenic DI (renal resistance to ADH)

Genetic

Drugs: lithium, demeclocycline

Chronic kidney disease

Electrolyte disturbances (hypercalcemia, hypokalemia)

#### C. Gestational DI

Increased vasopressinase in pregnancy

### Treatment

#### Central DI

Desmopressin (DDAVP) – nasal or oral

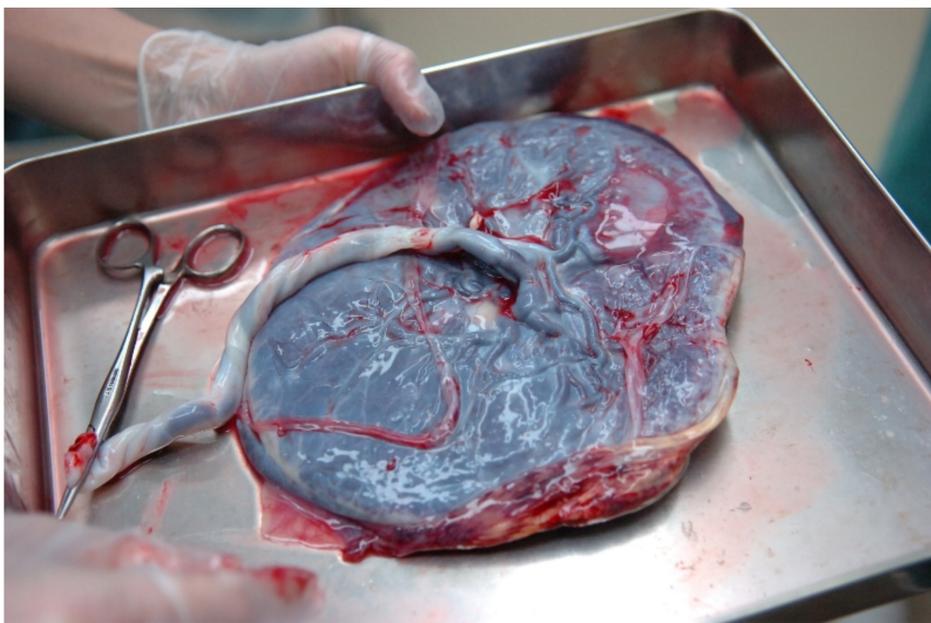
#### Nephrogenic DI

Correct underlying cause, low-salt diet, thiazide diuretics, NSAIDs (indomethacin)

#### Gestational

Desmopressin (safe in pregnancy)

**Supportive:** Ensure adequate hydration to prevent dehydration.



## 1 5. Placenta

### Identification / Picture

Flat, disc-shaped organ with maternal (red, rough) and fetal (shiny, smooth, chorionic) surfaces.

Umbilical cord attached centrally or eccentrically.

### Functions of Placenta

Respiratory: Gas exchange ( $O_2/CO_2$ )

Nutrition: Glucose, amino acids, fats

Excretory: Removes fetal waste (urea,  $CO_2$ )

Endocrine: hCG, progesterone, estrogen, placental lactogen

Immunological: IgG transfer to fetus

Barrier: Protects against some infections

### Active Management of Third Stage of Labour (AMTSL)

Purpose: Reduce postpartum hemorrhage (PPH)

Steps:

Uterotonic drug – Oxytocin 10 IU IM or IV infusion immediately after delivery of baby

Controlled cord traction (CCT) – Gently pull the cord while supporting uterus

Uterine massage – After delivery of placenta to ensure contraction

Optional / Additional:

Inspect placenta for completeness

Monitor maternal vitals and bleeding

## Placental Abruption (Abruptio Placentae)

### Scenario Clues:

Third-trimester bleeding, abdominal pain, uterine tenderness

Uterine hypertonicity / hard uterus

Fetal distress

### Diagnosis: Placental Abruption

**Clinical:** painful vaginal bleeding, tender uterus, hypertonicity

**Ultrasound:** may detect retroplacental clot (not always)

### Emergency Management:

#### Maternal stabilization:

IV access, fluids, blood cross-match

Monitor vitals

**Fetal assessment:** Continuous CTG

#### Delivery:

If term / fetal compromise / maternal instability → immediate cesarean section

If vaginal delivery safe and fetal/maternal stable → expedite vaginal delivery

### Other Measures:

Correct coagulopathy if present

Continuous monitoring

## Intrahepatic Cholestasis of Pregnancy (ICP)

### Scenario Clues:

Pregnant woman (usually 2nd/3rd trimester)

Severe pruritus, worse at night, mainly on palms and soles

Jaundice may be present

### Diagnosis / Investigations:

Serum bile acids ↑ (diagnostic, gold standard)

LFTs: Mild ↑ ALT, AST

Rule out other causes of jaundice

### Diagnosis:

Clinical pruritus + elevated serum bile acids

### Management:

Ursodeoxycholic acid (UDCA) – relieves itching, improves bile flow

Antihistamines for symptom relief

Early delivery at 37–38 weeks (due to fetal risk: stillbirth, preterm)

Monitor fetal wellbeing

## Uterine Rupture

### Definition:

Tearing of the uterine wall during pregnancy or labor, potentially life-threatening.

### Causes:

Previous cesarean section or uterine surgery → scar rupture  
Grand multiparity  
Obstructed labor / prolonged labor  
Oxytocin / prostaglandin overuse  
Trauma (e.g., accident)

### Signs & Symptoms:

#### Maternal:

Severe abdominal pain, “ripping” sensation  
Vaginal bleeding  
Shock (hypotension, tachycardia)  
Loss of uterine contractions / abnormal uterine contour

#### Fetal:

Fetal distress (bradycardia, decelerations)  
Loss of fetal station

### Management:

#### Immediate:

Call senior staff, IV fluids, oxygen, blood cross-match  
Emergency cesarean section if alive fetus  
Hysterectomy if uncontrolled bleeding or irreparable rupture  
Repair if small, localized rupture

#### Supportive:

Blood transfusions  
Monitor maternal vitals

Obstetrics 7

40 weeks POG Pregnant female comes with generalised tonic  
clonic seizure

Diagnosis eclampsia

Management

Shift to ICU

ABC

MgSO<sub>4</sub> &/or diazepam

Definitive treatment would be to deliver the fetus

## Magnesium Sulphate (MgSO<sub>4</sub>) – Eclampsia

### Loading Dose

4–6 g IV over 15–20 min

### Maintenance Dose

1 g/hour IV or 5 g IM every 4 h

### Side Effects / Toxicity

Loss of deep tendon reflexes, respiratory depression, hypotension, flushing

### Antidote

10% Calcium gluconate, 1 g IV slowly

## Postpartum Psychosis

### Scenario Clues

Usually within 2 weeks postpartum

Severe mood swings, hallucinations, confusion, agitation

### Diagnosis

Clinical assessment (acute onset, severe mood/psychotic symptoms)

Exclude medical causes: infection, thyroid, anemia, hypoglycemia

### Drug of Choice

Antipsychotic: Haloperidol or olanzapine

### Other Treatment Plan

Hospitalization for safety

Mood stabilizers if indicated (lithium)

Supportive care: family involvement, sleep regulation

### Complications

Suicide risk

Harm to infant

Relapse in future pregnancies

## First Antenatal Visit – Investigations & Homecare Advice

### Investigations

#### Blood:

Hb / CBC → anemia  
Blood group & Rh typing  
VDRL → syphilis  
HBsAg → hepatitis B  
HIV  
Rubella / varicella immunity  
Fasting blood sugar → gestational diabetes baseline

#### Urine:

Routine urinalysis → protein, sugar, infection  
Urine culture if indicated

#### Other:

Pap smear if due  
Optional: baseline renal/liver function if risk factors

### Homecare Advice

Diet: balanced, iron-rich, folate 400 mcg/day  
Supplements: Iron, folic acid, calcium  
Avoid alcohol, smoking, and teratogens  
Physical activity: mild/moderate exercise  
Vaccinations: Influenza, Tdap if indicated  
Awareness of danger signs: vaginal bleeding, severe headache, blurred vision, fever, reduced fetal movements

## Herpes in Pregnancy

### Scenario / External Viva Clues

Genital vesicular lesions  
Painful, grouped, recurrent

### Diagnosis

Clinical: painful vesicles, ulcers  
PCR or viral culture  
Serology (HSV-1/2) if needed

### Complications

Maternal: secondary infection, recurrent outbreaks  
Neonatal: neonatal herpes (can be severe, systemic)

### Mode of Delivery

Cesarean section if active lesions at labor onset  
Vaginal delivery if no active lesions and >36 weeks

### Drug of Choice

Acyclovir 400 mg orally 5×/day or IV if severe  
Suppressive therapy in late pregnancy to prevent outbreaks

## Postpartum Sepsis

### Scenario Clues

Fever  $>38^{\circ}\text{C}$  within 6 weeks of delivery  
Abdominal pain, foul-smelling lochia, uterine tenderness  
Tachycardia, hypotension

### Diagnosis

Clinical suspicion (uterine tenderness, fever, systemic signs)  
Blood culture if needed

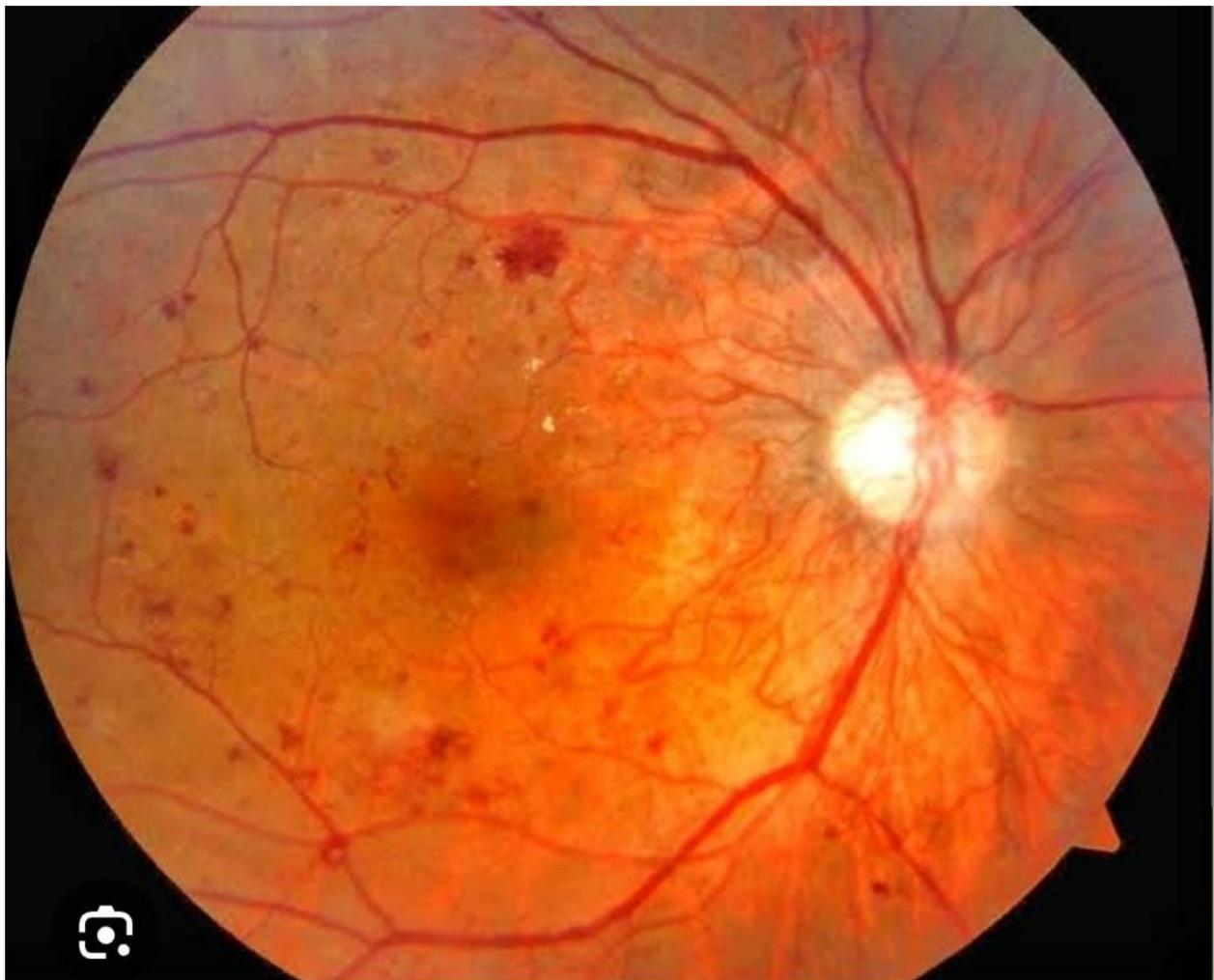
### Investigations

CBC  $\rightarrow$  leukocytosis  
CRP  $\rightarrow$  inflammatory marker  
Blood / urine cultures  
Vaginal swab for pathogens  
Ultrasound: retained products

### Management

Hospital admission  
IV broad-spectrum antibiotics (e.g., Ampicillin + Gentamicin  $\pm$  Metronidazole)  
Treat underlying cause (evacuation if retained products)

**Supportive care:** fluids, monitoring, analgesia



## Diabetic Retinopathy

### Findings on Fundoscopy

- Microaneurysms (small red dots)
- Cotton wool spots (white patches)
- Retinal hemorrhages (flame-shaped)
- Hard exudates (yellow spots)
- Neovascularization (advanced, proliferative)

### Diagnosis

- Fundoscopy, fundus photography
- Fluorescein angiography if needed

### Complications

- Vitreous hemorrhage
- Retinal detachment
- Vision loss / blindness

### Management

- Glycemic, BP, lipid control
- Laser photocoagulation for proliferative stage
- Anti-VEGF injections
- Vitrectomy in severe cases

## Fibroadenoma (Breast – Surgical Viva)

### Identification / Clinical Features

Well-circumscribed, mobile, firm, painless breast lump  
Usually in women <35 years

### Investigations

Ultrasound / mammography  
FNAC for confirmation if uncertain

### Management

Reassurance if small, stable, <3 cm

### Surgical excision if:

Rapidly growing  
Symptomatic  
Diagnostic uncertainty

## Mastitis (Surgical Viva)

### Clinical Features

Breast pain, redness, swelling, warmth  
Fever, malaise  
Usually lactating women

### Investigations

Mostly clinical  
Ultrasound if abscess suspected

### Management

Continue breastfeeding / milk expression  
Antibiotics: Flucloxacillin or cephalexin  
Incision & drainage if abscess present

## Hyperthyroidism (History Taking – Medicine Viva)

### Important History Points

Symptoms: weight loss, heat intolerance, palpitations, tremors, increased sweating, diarrhea

Menstrual irregularities

Eye changes: exophthalmos, diplopia

Past history: thyroid disease, medications (amiodarone, iodine)

Family history of thyroid disease

### Examination Tips

Tremors, tachycardia, goiter, eye signs, warm moist skin

## Pediatric Hypothyroidism (Picture / Scenario)

### Clinical Features

Growth retardation, delayed milestones

Puffy face, macroglossia

Constipation, lethargy

Coarse hair, dry skin

### Diagnosis / Investigations

TSH ↑, free T4 ↓

Thyroid imaging if needed (dysgenesis vs dyshormonogenesis)

Neonatal screening

### Management

Lifelong levothyroxine replacement

## Vacuum-Assisted Vaginal Delivery

### Indications

- Prolonged second stage of labor
- Fetal distress
- Maternal exhaustion

### Pre-requisites

- Fully dilated cervix
- Ruptured membranes
- Vertex presentation
- No cephalopelvic disproportion

### Procedure / Key Points

- Apply cup to fetal scalp
- Suction to vacuum device
- Gentle traction during maternal pushing
- Limit attempts to reduce trauma

### Complications

- Maternal: perineal tears, hematoma
- Fetal: scalp bruising, cephalohematoma, subgaleal hemorrhage

## 2 Repair of Episiotomy

### Indications

After vaginal delivery with episiotomy or perineal tear

### Steps

- Local anesthesia
- Clean area, identify muscle layers
- Continuous or interrupted sutures:
  - Vaginal mucosa: absorbable
  - Perineal muscles: absorbable
  - Skin: subcuticular or interrupted
- Hemostasis and dressing

### Complications

Infection, hematoma, wound dehiscence, dyspareunia

## HIV-Positive Mother (Obstetrics)

### Treatment

HAART during pregnancy: triple therapy as per guidelines (e.g., TDF + 3TC + EFV)

### Mode of Delivery

Elective cesarean if high viral load

Vaginal delivery possible if viral load <50 copies/ml

### Advice

Avoid breastfeeding (if formula feeding available)

Neonatal prophylaxis for baby (Zidovudine for 6 weeks)

Regular monitoring of maternal viral load and CD4

Hematuria – Specific History

Onset: painless vs painful

Associated symptoms: dysuria, frequency, urgency

Systemic: fever, weight loss

Past history: stones, trauma, infection, malignancy

Medications / anticoagulants

**8** Iron-Deficiency Anemia in Pregnancy

Signs / Symptoms

Fatigue, pallor, palpitations, shortness of breath

Investigations

Hb, MCV, MCH, peripheral smear (microcytic hypochromic)

Ferritin ↓

Reticulocyte count normal/low

Management

Oral iron (ferrous sulfate) 100–200 mg/day

Vitamin C to enhance absorption

Monitor Hb and ferritin

**10** Hypertension in Pregnancy (Scenario)

Classification

Chronic hypertension

Gestational hypertension

Preeclampsia: BP  $\geq$ 140/90 + proteinuria or end-organ damage

Eclampsia: Preeclampsia + seizures

Investigations

BP measurement

Urinalysis / proteinuria

CBC, LFTs, creatinine

Fetal assessment: USG, Doppler

Management

Mild gestational hypertension: monitoring, lifestyle

Severe: antihypertensives (labetalol, methyldopa, nifedipine)

Preeclampsia: magnesium sulfate for seizure prophylaxis, plan delivery

# Diabetes

## I. Introduction:

### ▪ WHO Diagnostic Criteria:

- **Diabetes in pregnancy is diagnosed if  $\geq 1$  criteria are met:**
  - Fasting blood glucose of  $\geq 126$  mg/dL ( $\geq 7$  mmol/L)
  - 2-hour blood glucose of  $\geq 200$  mg/dL ( $\geq 11.1$  mmol/L) after a 75-g oral glucose tolerance test.
  - Random blood glucose of  $\geq 200$  mg/dL ( $\geq 11.1$  mmol/L) in the presence of diabetic symptoms.
  
- **Gestational Diabetes in pregnancy is diagnosed if  $\geq 1$  criteria are met:**
  - Fasting blood glucose of  $> 92 - 125$  mg/dL ( $> 5.1 - 6.9$  mmol/L).
  - 1-hour plasma glucose of  $> 180$  mg/dL (10.0 mmol/L) after 75-g OGTT.
  - 2-hour plasma glucose of  $> 153 - 199$  mg/dL (8.5 - 11 mmol/L) after 75-g OGTT
  
- Therefore, Gestational Diabetes (GDM) can be diagnosed at any stage of pregnancy when patient has hyperglycemia that doesn't meet the criteria for overt diabetes mellitus, but meets criteria for GDM.

## Gestational Diabetes (GDM)

### Screening

24–28 weeks: OGTT (75 g glucose)

### Diagnosis

Fasting  $\geq 92$  mg/dL

1h  $\geq 180$  mg/dL

2h  $\geq 153$  mg/dL

### Management

Diet & lifestyle first-line

Insulin if not controlled

Monitor fetal growth

## BPH (Benign Prostatic Hyperplasia)

### History

LUTS: frequency, urgency, nocturia, weak stream, incomplete emptying  
Hematuria / recurrent infections

### Investigations

Digital rectal exam

PSA

Ultrasound: prostate size, post-void residual

### Management

Medical:  $\alpha$ -blockers (tamsulosin), 5 $\alpha$ -reductase inhibitors (finasteride)

Surgical: TURP if refractory

## 5 PCNL (Percutaneous Nephrolithotomy) – Counseling

Indication: Large kidney stones

Procedure: Small incision in back, nephroscope to remove stones

Risks: Bleeding, infection, adjacent organ injury

Post-op: Catheter care, hydration, follow-up imaging

## 6 AKI Discharge Counseling

Medication review: avoid nephrotoxins

Fluid and dietary advice (low salt, adequate protein as per renal function)

Monitor urine output

Follow-up labs: serum creatinine, electrolytes

Warning signs: edema, reduced urine, confusion

## Teratogenic Effects of Drugs

### Sulfonamides

Kernicterus in newborn (late pregnancy)

### Warfarin

Fetal warfarin syndrome: nasal hypoplasia, stippled epiphyses, CNS anomalies

### Antiepileptics (phenytoin, valproate)

Neural tube defects, cleft lip/palate, cardiac defects

### NSAIDs

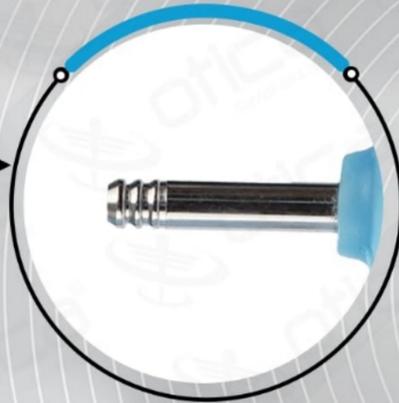
Premature closure of ductus arteriosus (3rd trimester), oligohydramnios

## Bishop score

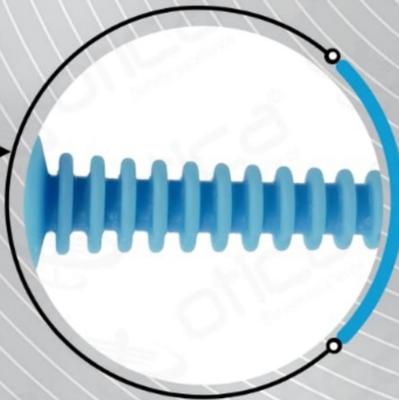
Bishop score [32]				
	Score			
	0 points	1 point	2 points	3 points
<b>Cervical position</b>	Posterior	Midline	Anterior	
<b>Cervical consistency</b>	Firm	Moderately firm	Soft (ripe)	
<b>Cervical effacement</b>	≤ 30%	31–50%	51–80%	> 80%
<b>Cervical dilation</b>	Closed	1–2 cm	3–4 cm	≥ 5 cm
<b>Fetal station</b>	-3 cm	-2 cm	-1/0 cm	+1/+2 cm

# Ventouse Cup Parts

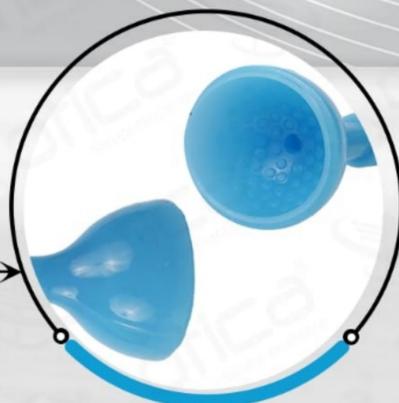
## Product Parameter



Fore Tubing



Handle

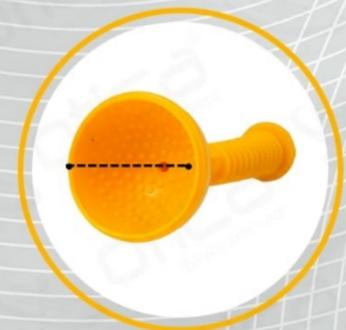


Suction Cup

### Available Size



50 mm



60 mm



70 mm

MNEMONIC

Dichorionic Diamniotic

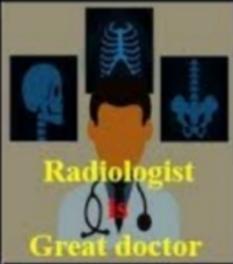
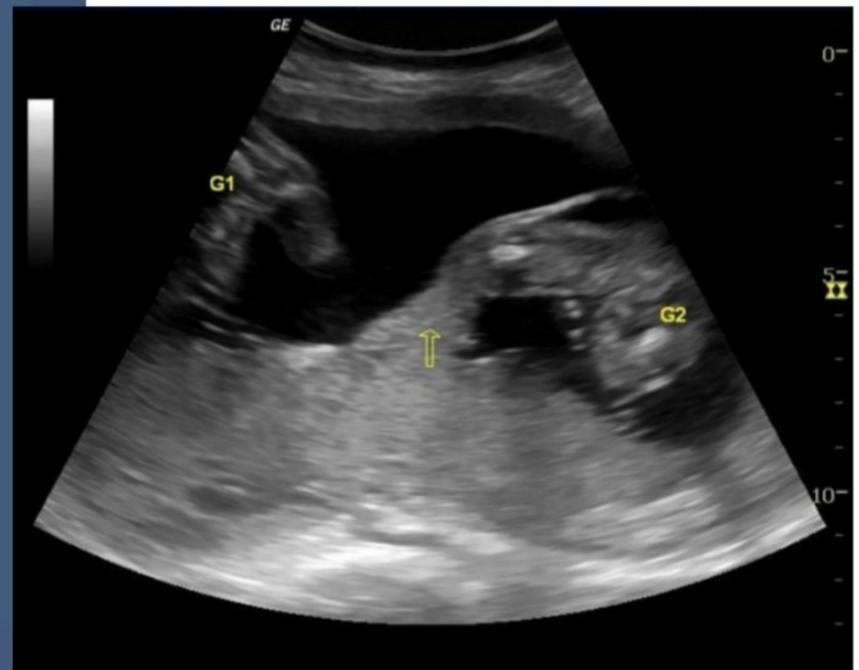
LaDDu

» L - Lambda sign ( $\lambda$ )

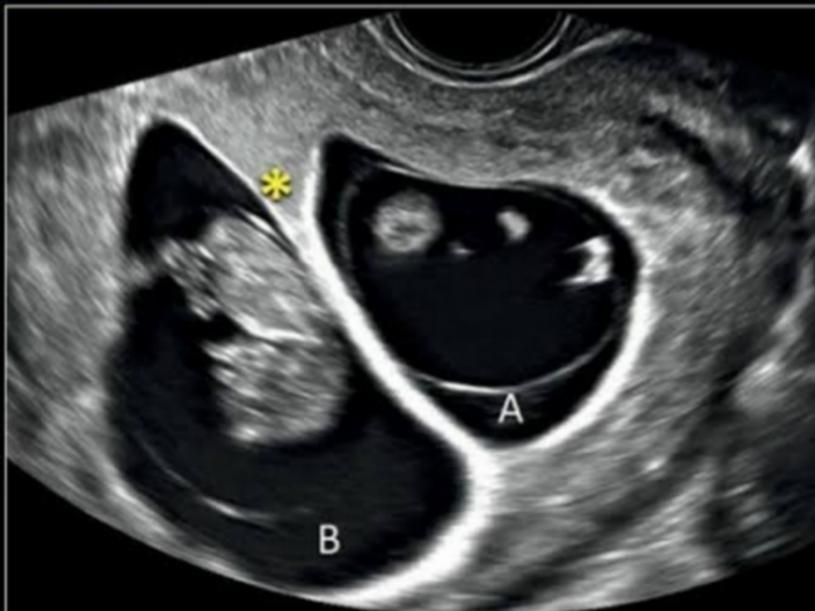
The twin peak sign (lambda ( $\lambda$ ) sign)

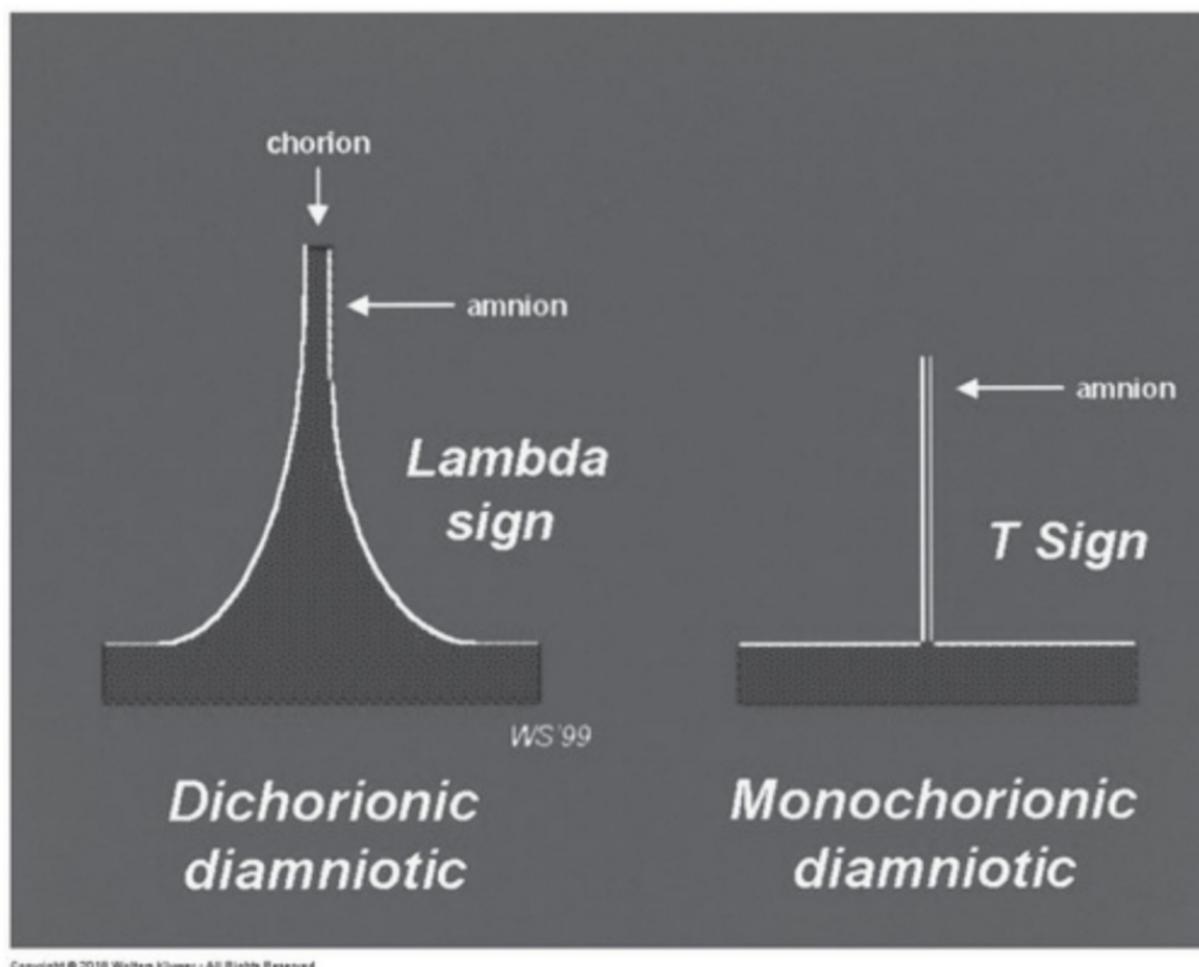


- » D - Dichorionic
- D - Diamniotic



- » Thick inter-twin membrane (> 2 mm).
- » Twin-peak sign (asterisk) at the placental insertion of the membranes.
- » Type of twins !





<p><b>Monochorionic Diamniotic</b></p> <p>This ultrasound image shows a thin membrane (T sign) connecting the two fetuses to a single placenta. A blue arrow points to the T-shaped membrane.</p> <p><b>T Sign</b></p> <ul style="list-style-type: none"> <li>• Indication of Monochorionic diamniotic pregnancy</li> <li>• Thin membrane that attaches in a T shaped configuration</li> </ul>	<p><b>Dichorionic Diamniotic</b></p> <p>This ultrasound image shows two separate placentas and two fetuses (Twin A and Twin B). A red arrow points to a thick, triangular membrane (Twin Peak Sign) between the two placentas.</p> <p><b>Twin Peak Sign (Lambda Sign)</b></p> <ul style="list-style-type: none"> <li>• Indication of Dichorionic diamniotic pregnancy</li> <li>• Thick triangular shaped chorion abutting the intertwin membrane</li> </ul>
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