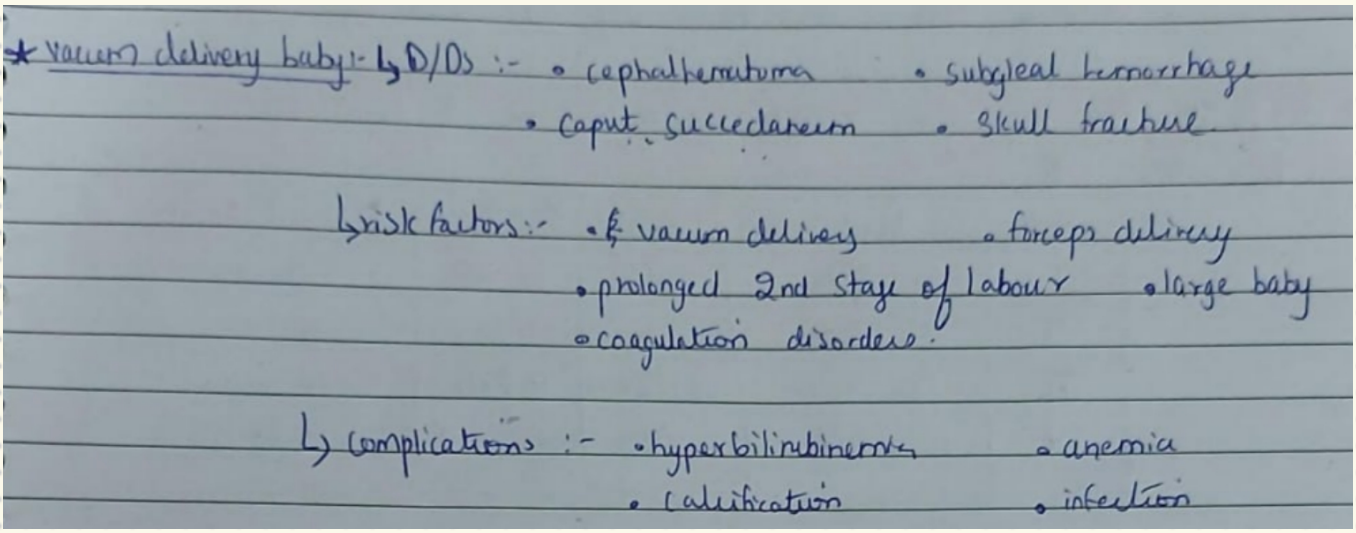
BLOCK N

2025

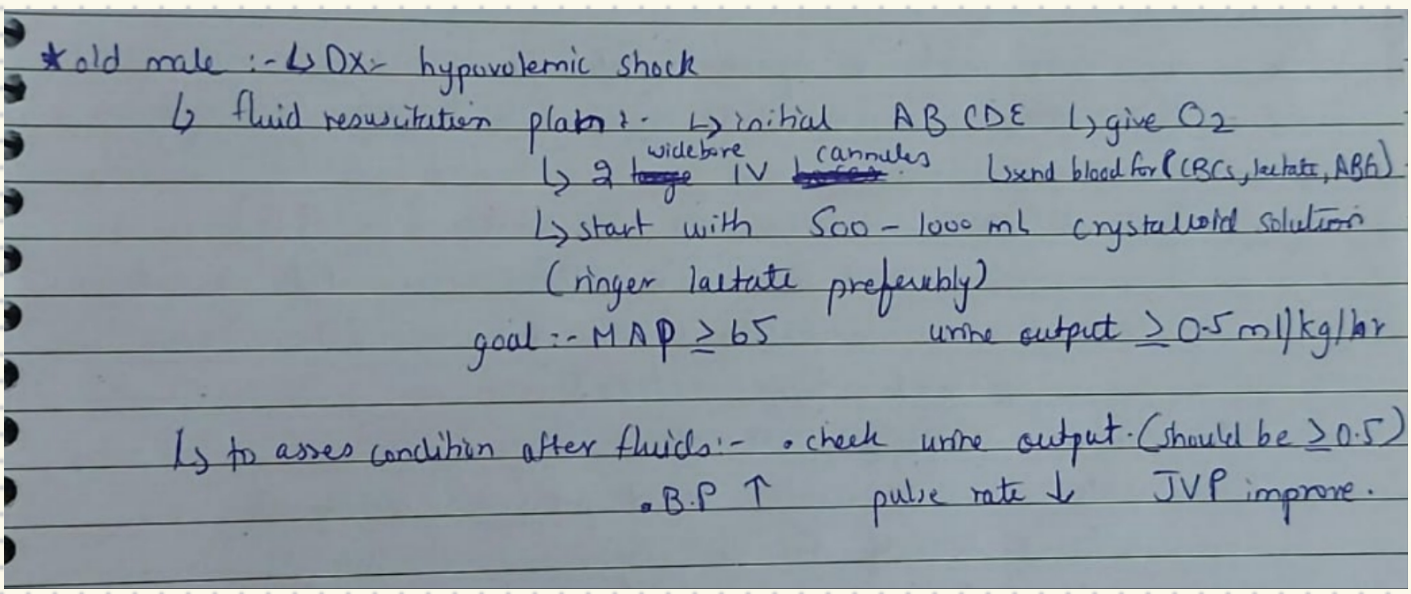
Table 6: OSCE station distribution of different subjects

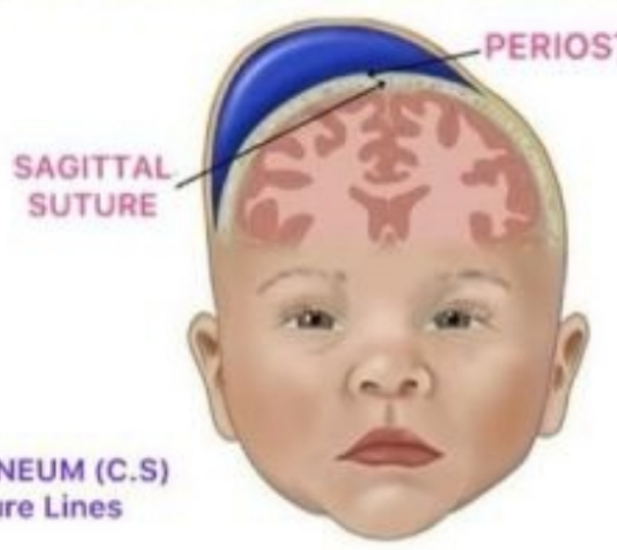
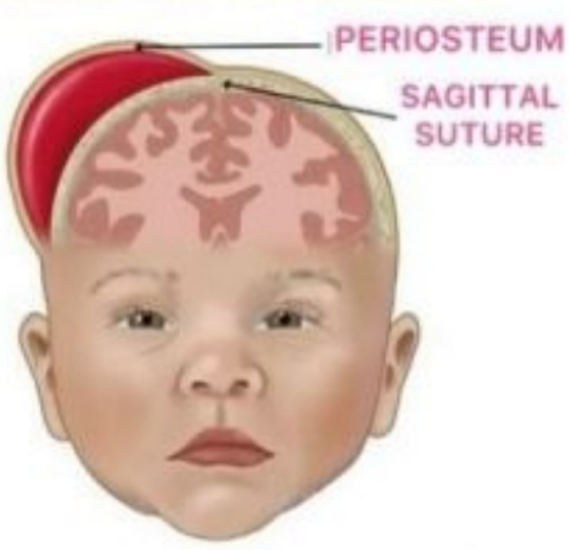
BLOCK-N (TOTAL STATIONS=20 and 6 marks/station)					
Subjects	OSCE stations		Viva stations	Logbook and history books (1-station)	Structured Long case =30 marks)
	Static/ interactive	Short cases			
Medicine+ Rheumatology	2	2	1	General Surgery and allied	General Surgery
Surgery	2	0	1		
Paediatrics	2	2	1		
Orthopedics	1	1	1		
Dermatology	2	0	1		
Total	9	5	5	1	1

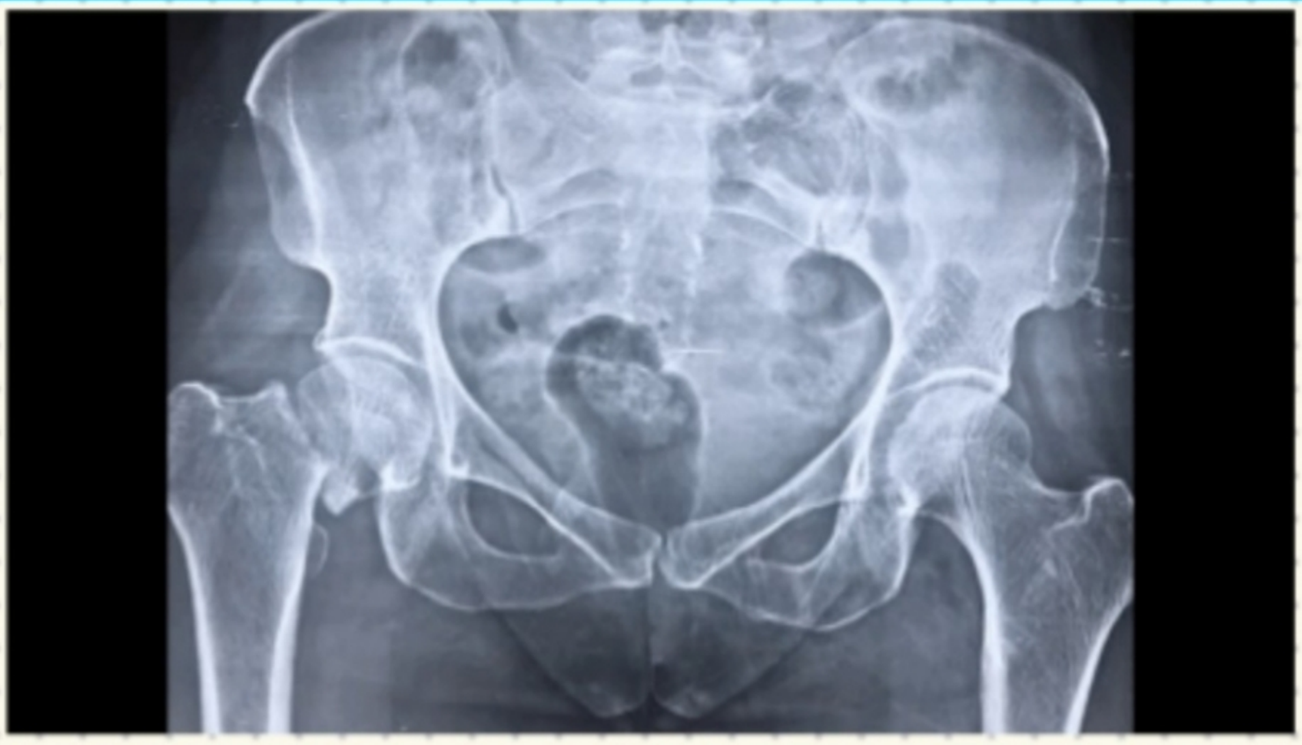
📌(written) 1 day baby born with vaccum delivery parietal protrusion that doesnot cross suture lines but all normal in functions no pitting feeding normally cell count all normal hb 15 bilirubin not yet high enough phototherapy
What are differentials
WhAt are risk
What are complication



📌(written) 65 yr old male drowsy breathless and vomiting
Pulse high bp low jvp diminished urine output negligible
Diagnosis
Fluid resucitation plan
How to Asess his condition after fluids



	CAPUT SUCCEDANEUM	CEPHALOHEMATOMA
	Swelling of the scalp itself, not involving bleeding under the skull  CAPUT SUCCEDANEUM (C.S) C.S=Cross Suture Lines	A collection of blood between baby's scalp and skull 
CAUSE	Caused by prolonged pressure being exerted on baby's head during delivery by a dilated cervix or vaginal walls **Using forceps or extraction tools can increase chances	Commonly caused by blood vessels that were damaged during labor and delivery **May be damaged from difficult delivery, forceps, or vacuum extraction
LOCATION	Extends across suture lines; not well defined	Well defined by suture; gradually developing, hard edge
SIZE	Size largest at birth, gradually subsides within 48 hours	Becomes larger after birth, then disappears within 6-8 months
SYMPTOMS	• Puffiness/bulging around affected area • Bruising of baby's scalp • Increased molding (elongation) of baby's head • Newborn jaundice (not always)	• Accumulation of blood under the scalp and above baby's skull, causing bulging **Because of its location under the periosteum, you will probably not see any cut or bruise on the surface of the skin over the bulge
DAMAGE	Typically no underlying skull bone fracture	May have underlying skull bone fracture
TREATMENT	Almost always goes away on its own within a few days **If jaundice, light therapy	Let the body naturally reabsorb the collected fluid; will resolve within a few months **If complications arise, drain the blood



📌(written) Femur neck fracture xray (fall from 20 feet)

Diagnosis

Attitude of limb on examination

Management

★ femur fracture :- ◦ Dx :- fracture of neck of femur (intracapsular) (probably displaced too due to weight)

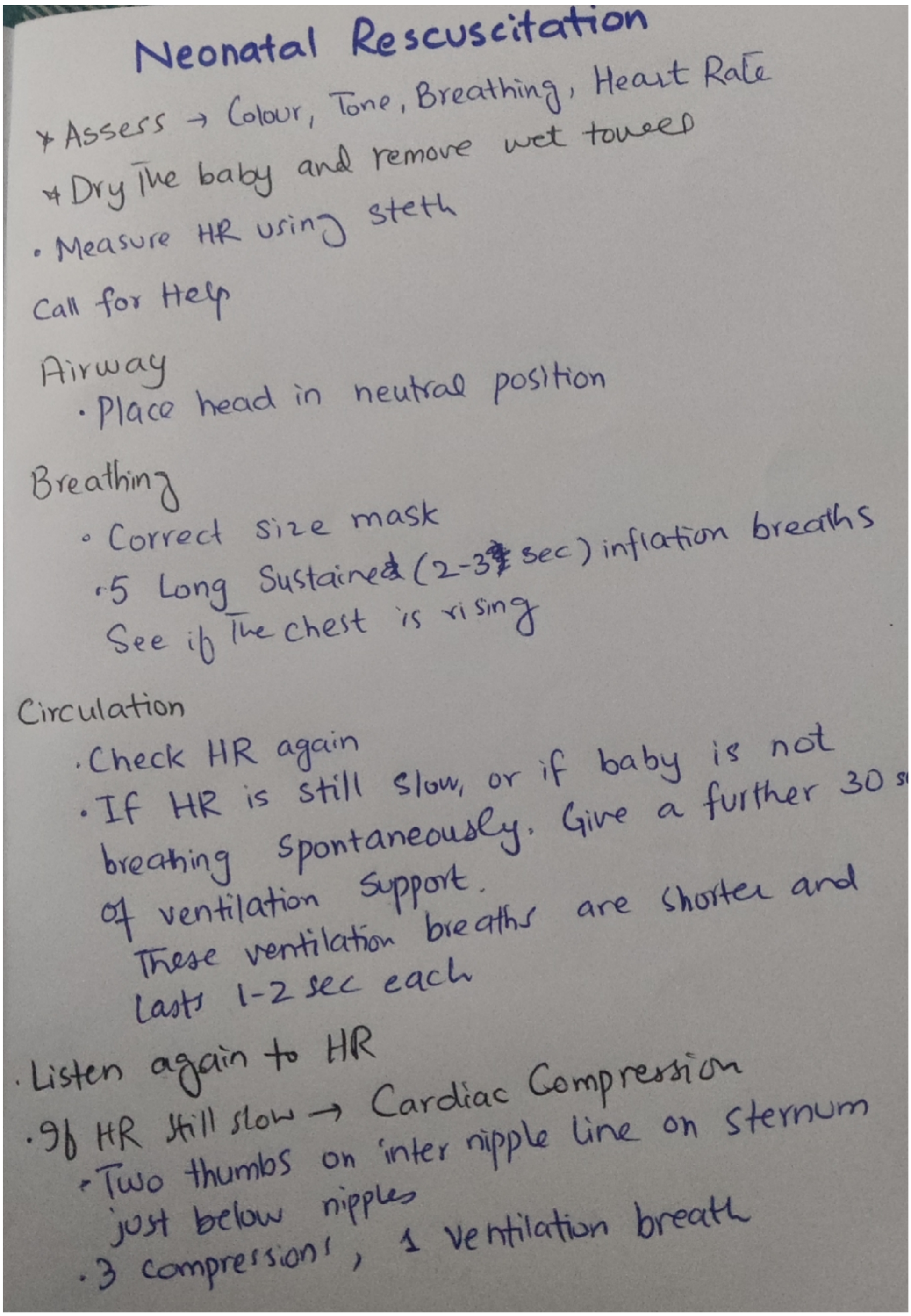
◦ attitude of limb :- L shortened
L external rotation
L painful hip movements
L if no dislocation (then shortened only)

◦ Mx :- ◦ ABCDE ◦ rule out spine injury ◦ IV line + analgesia

◦ X ray pelvis & both hips.

◦ if pt young then urgent reduction & internal fixation by using dynamic hip screw.

📌(viva)Term Baby not crying floppy no respiratory effort
How will u assess the baby
And wt is the management
(neonatal resuscitation)

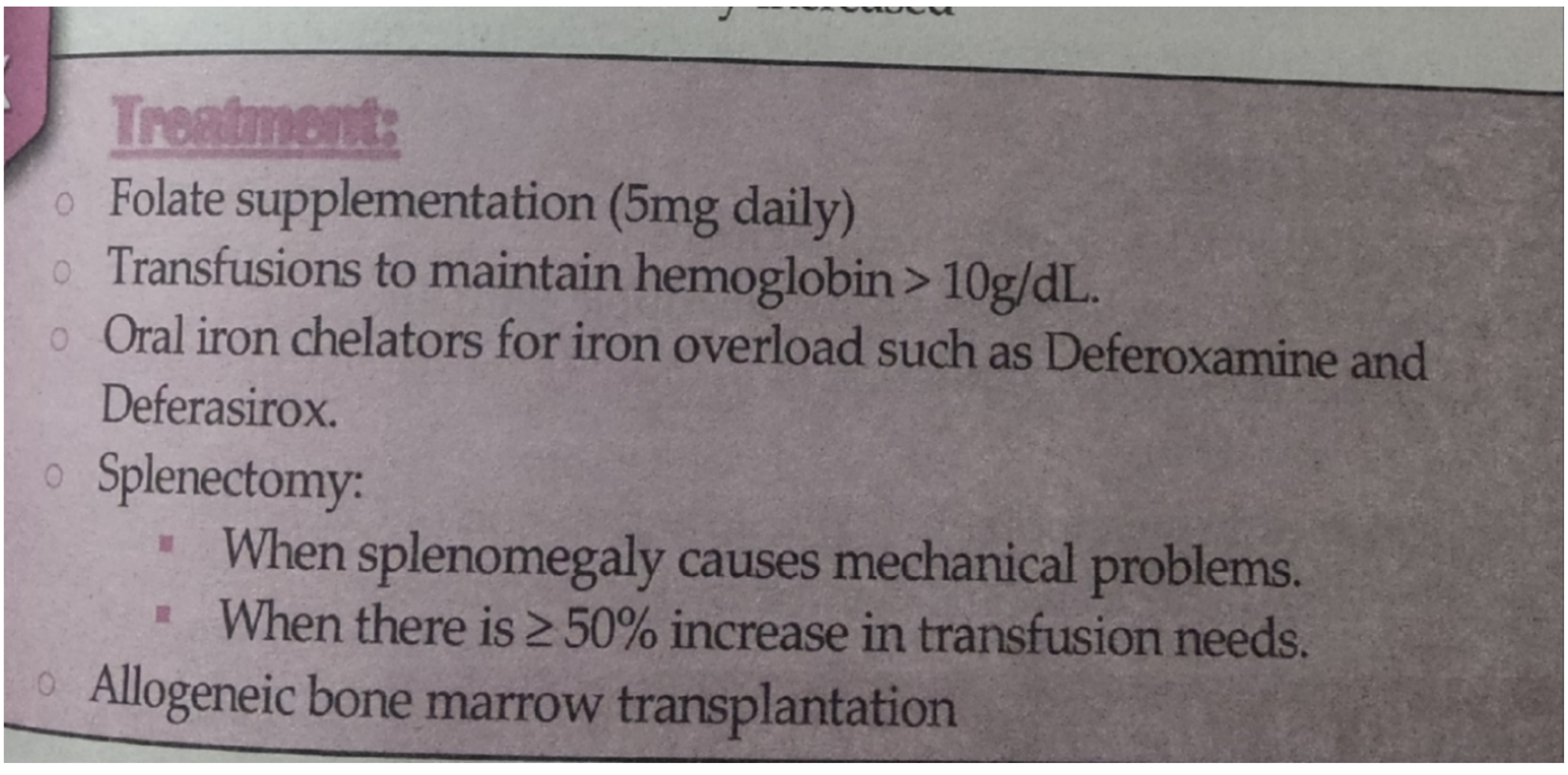


📌(viva) Small child pale hepatosplenomgaly blood transfusions hx frontal bone prominence
Hb low MCV low platelet and wbc normal
Diagnosis
Test for confirmation (more than one)
Management

Diagnosis: Beta thalassemia Major

Investigations

* Hb Electrophoresis - increased HbF, increased HbA2, absent or low HbA
* Peripheral Smear (Microcytosis, hypochromia, target cells, nucleated RBCs)
* Serum ferritin (increased due to transfusions)
* Gene testing (beta globin mutation



Treatment:

- Folate supplementation (5mg daily)
- Transfusions to maintain hemoglobin > 10g/dL.
- Oral iron chelators for iron overload such as Deferoxamine and Deferasirox.
- Splenectomy:
  - When splenomegaly causes mechanical problems.
  - When there is ≥ 50% increase in transfusion needs.
- Allogeneic bone marrow transplantation

📌(written) Match the disease to investigation

Psoriatic arthritis :	pencil cup deformity
Polymyositis :	emg
Anti phospholipid syndrome :	anticardiolipin
Sjogren :	anti ssa ssb
reactive arthritis :	hla b27
Giant cell arteritis :	temporal artery biopsy

📌(written in front of teacher) Little girl with rash on nose and cheeks and skin tightness and photosensitivity
Diagnosis
Diagmostic criteria

Diagnosis: Systemic Lupus Erythematosus

📋 Diagnostic Criteria (ACR Criteria – commonly written in exams)

Diagnosis requires **≥ 4 out of 11 criteria**

1️⃣ Malar rash

Fixed erythema over cheeks and nasal bridge (butterfly rash)

2️⃣ Discoid rash

Raised patches with scaling

3️⃣ Photosensitivity

Skin rash after sun exposure

4️⃣ Oral ulcers

Painless

5️⃣ Arthritis

Non-erosive, involving ≥2 peripheral joints

6️⃣ Serositis

- Pleuritis
- Pericarditis

7️⃣ Renal disorder

- Proteinuria >0.5 g/day
- Cellular casts

8️⃣ Neurologic disorder

- Seizures
- Psychosis

9️⃣ Hematologic disorder

- Hemolytic anemia
- Leukopenia
- Lymphopenia
- Thrombocytopenia

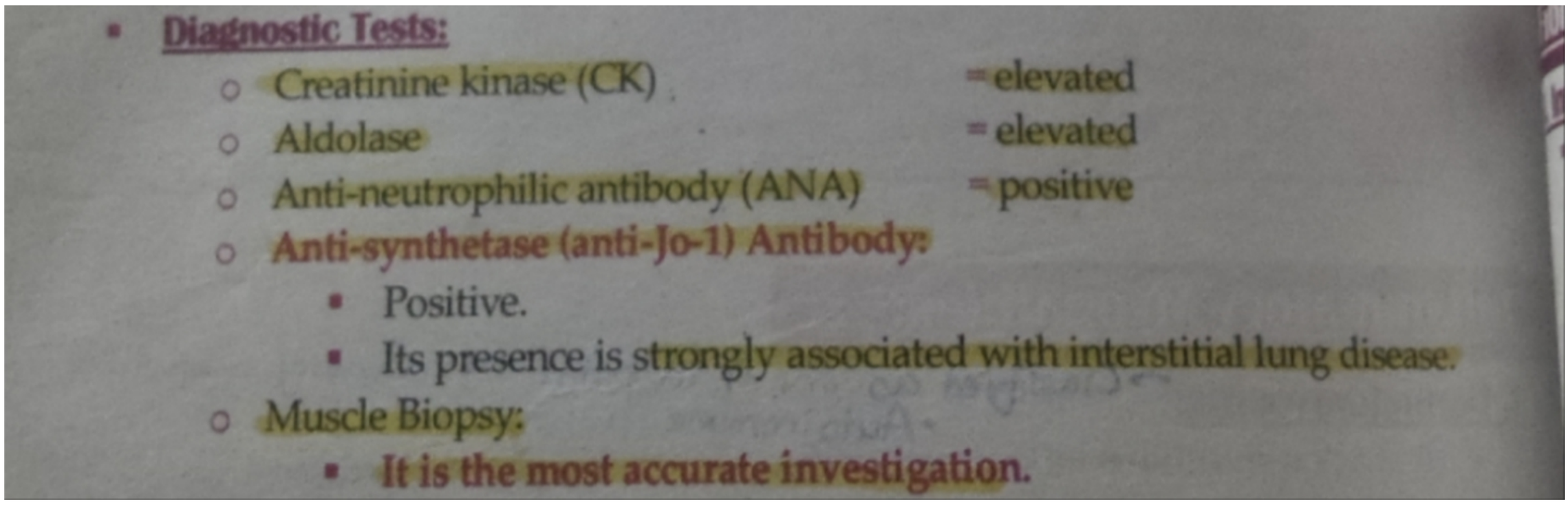
🔟 Immunologic disorder

- Anti-dsDNA
- Anti-Sm
- Anti-phospholipid antibodies

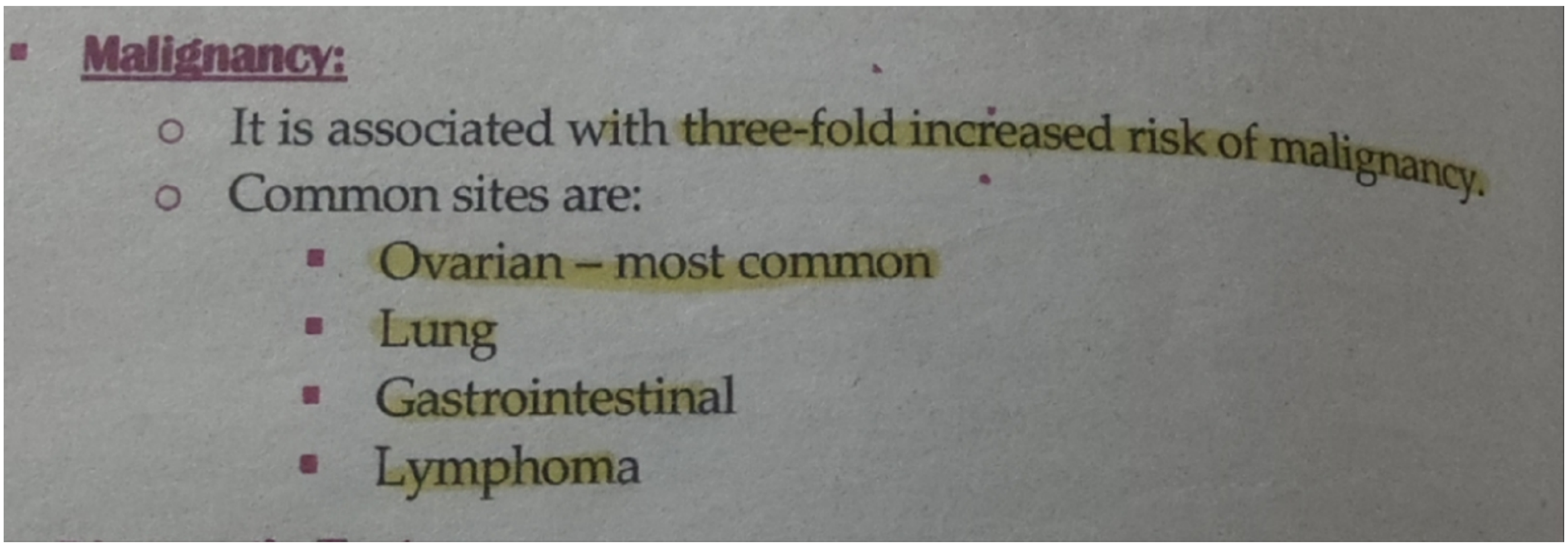
1️⃣1️⃣ Positive ANA

managment:
* Avoid sun exposure
* Analgesic and NSAIDs for mild disease limited to skin and joints
* Hydroxychloroquine is cornerstone of therapy
* Glucocorticoids
* Immunosuppresive agents

📌(viva) Dermatomyositis scenario (man with weakness of muscles unable to comb hair has purplish discoloration of eyes and rash on hands)
Diagnosis
Confirmatory test
Managememt
additional Q → malignancy associated with dermatomyositis


- **Diagnostic Tests:**
  - Creatinine kinase (CK) = elevated
  - Aldolase = elevated
  - Anti-neutrophilic antibody (ANA) = positive
  - **Anti-synthetase (anti-Jo-1) Antibody:**
    - Positive.
    - Its presence is strongly associated with interstitial lung disease.
  - Muscle Biopsy:
    - **It is the most accurate investigation.**

Mainstay of treatment - steroids
* When unresponsive to steroids
Methotrexate
Azathioprine
IVIG
Mycophenolate


- **Malignancy:**
  - It is associated with three-fold increased risk of malignancy.
  - Common sites are:
    - Ovarian – most common
    - Lung
    - Gastrointestinal
    - Lymphoma

📌(Counselling) a patient with pancytopenia
Diagnosis differentials
Further tests (bone marrow biopsy but since it will be giving a dry tap then trephine biopsy)
Management

* pancytopenia D/DS :- L aplastic anemia
L auto leukemia
L drug induced (chemotherapy, benzene)
L myelodysplatic syndrome.
L infections with parvovirus, EBV, HIV
L megaloblastic anemia severe B12/folate
L hypersplenism (sequestration crisis)

tests :- L CBC, peripheral smear, retic count, B12 folate, liver & renal functions, iron studies.
* L bone marrow aspiration (if dry tap then trephine biopsy)
L viral serology

Mx :- supportive care (transfusions, infection prevention), definitive therapy based on cause (stem cell transplant, immunosuppressive therapy, vitamin replacement, chemotherapy)

📌(viva) Patient has to go for emergency laproscopic appendectomy
What would be parts of a valid consent
How would u explain in easy word about procedure
What would be risks of procedure
What other management can u offer if she is reluctant to surgery

1️⃣ Parts of a Valid Consent

A valid consent must include:

✅ 1. Capacity

Patient must be:

- Conscious
- Mentally competent
- Able to understand information

✅ 2. Voluntariness

- No pressure or coercion
- Decision made freely

✅ 3. Adequate Information (Informed Consent)

Explain:

- Diagnosis
- Nature of procedure
- Risks & benefits
- Alternatives
- Consequences of not treating

✅ 4. Documentation

- Written consent
- Signed by patient
- Signed by doctor & witness

2️⃣ How to Explain the Procedure in Simple Words

"Your symptoms suggest that your appendix is inflamed. This condition is called appendicitis. If we don't remove it, it can burst and cause serious infection inside the abdomen."

"We plan to remove the appendix using keyhole surgery. We make 3 small cuts in your abdomen, insert a camera and instruments, and remove the infected appendix."

"It is usually a short procedure and recovery is faster compared to open surgery."

3️⃣ Risks of Laparoscopic Appendectomy

Common Risks:

- Pain
- Nausea/vomiting
- Small scars

Surgical Risks:

- Bleeding
- Infection at wound site
- Injury to nearby organs (bowel, bladder)
- Conversion to open surgery

Anesthesia Risks:

- Allergic reaction
- Breathing problems

Serious but Rare:

- Intra-abdominal abscess
- Sepsis

4️⃣ If Patient is Reluctant – Alternative Management

Explain honestly:

"In some selected cases, we can try treatment with intravenous antibiotics."

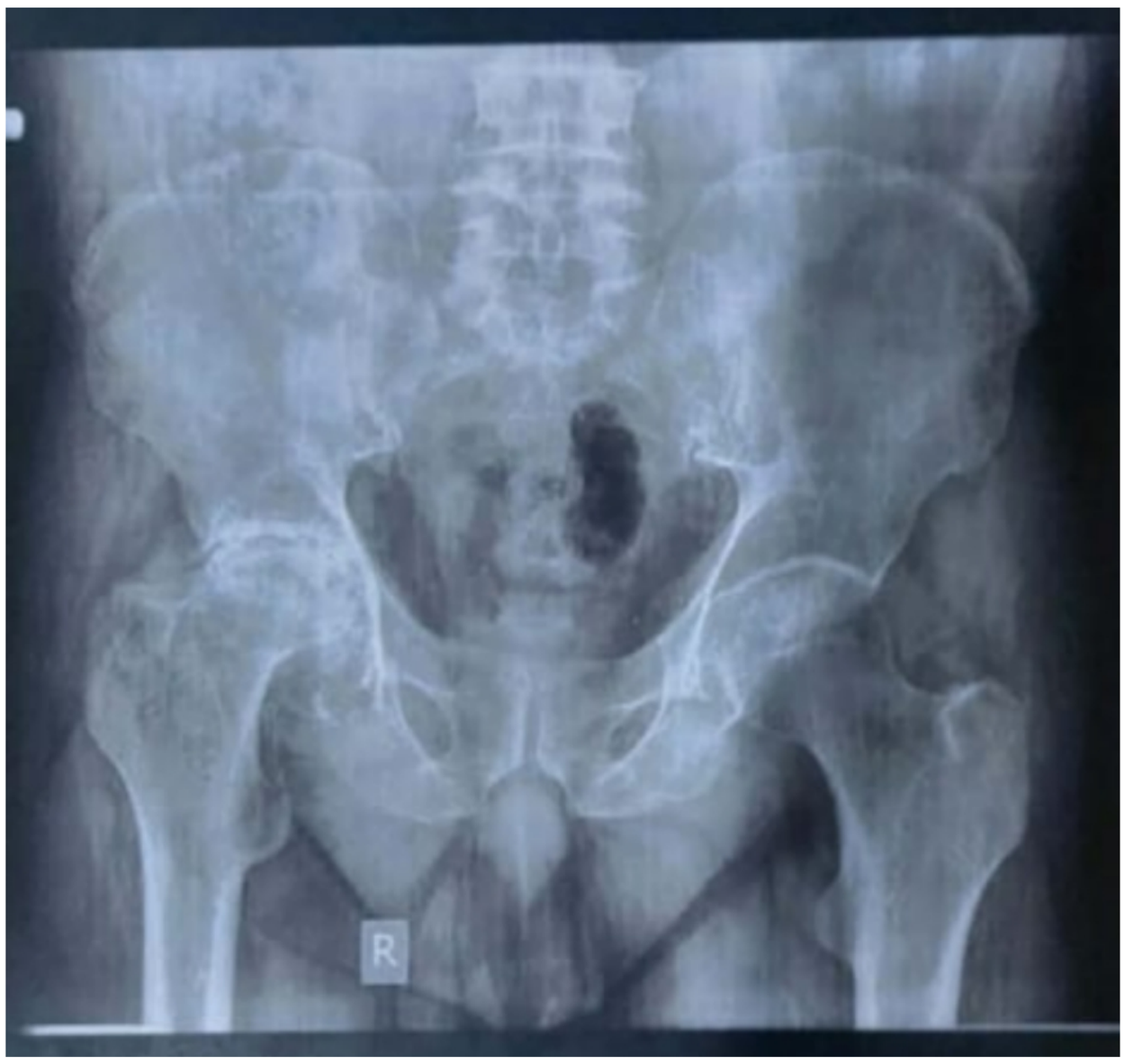
Conservative (Non-surgical) Management:

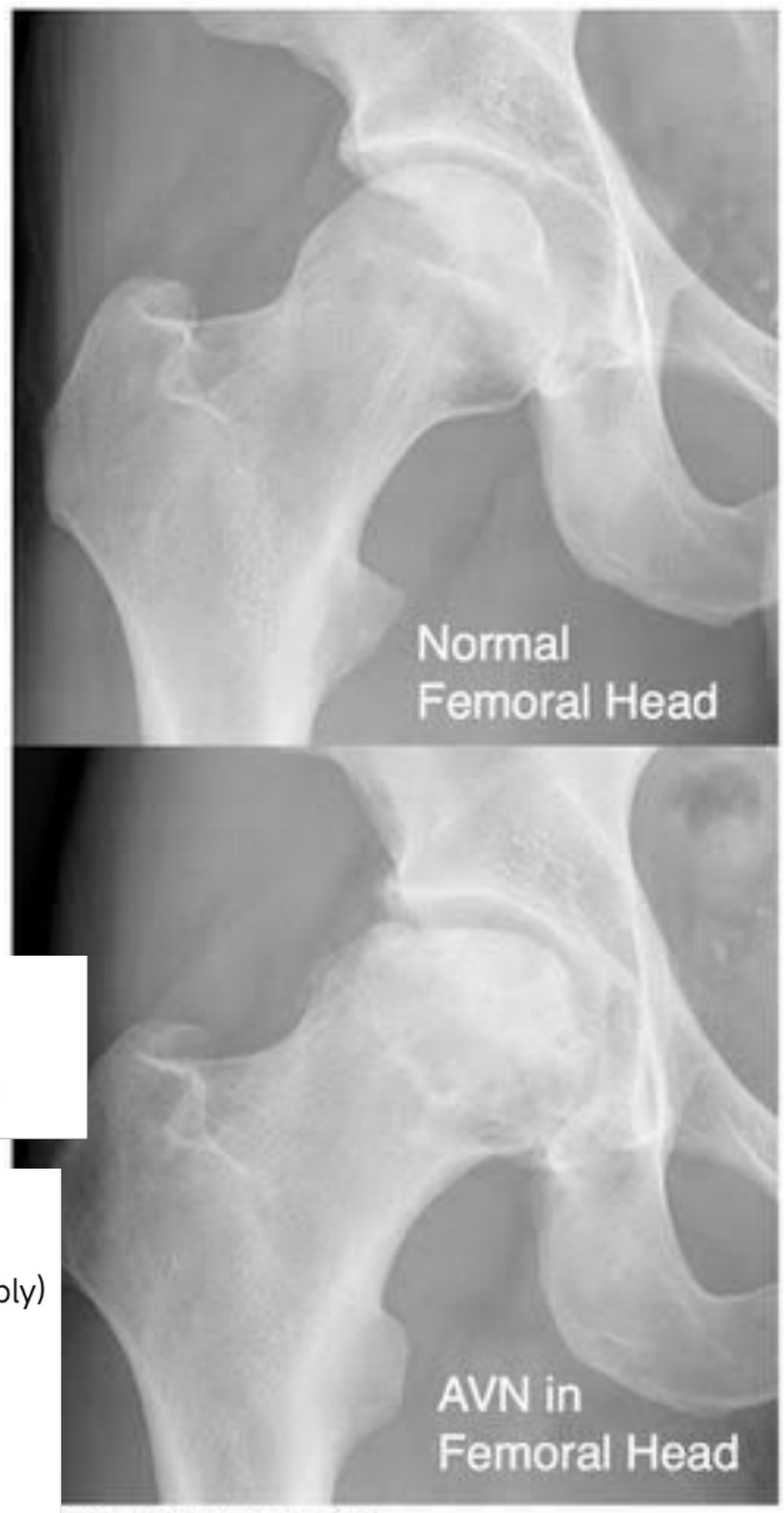
- IV antibiotics
- Pain control
- Observation

BUT explain risks:

- Appendix may burst
- Recurrence risk (appendicitis can come back)
- May still need emergency surgery later

If perforation suspected → surgery is strongly recommended.





🦴 Avascular Necrosis (AVN) of Head of Femur

Also called **osteonecrosis** — death of bone tissue due to loss of blood supply.

🩸 Blood Supply of Femoral Head (important in viva)

- Retinacular branches of **medial circumflex femoral artery** (main supply)
- Lateral circumflex femoral artery
- Artery of ligamentum teres (minor in adults)

Damage or obstruction → ischemia → necrosis → collapse.

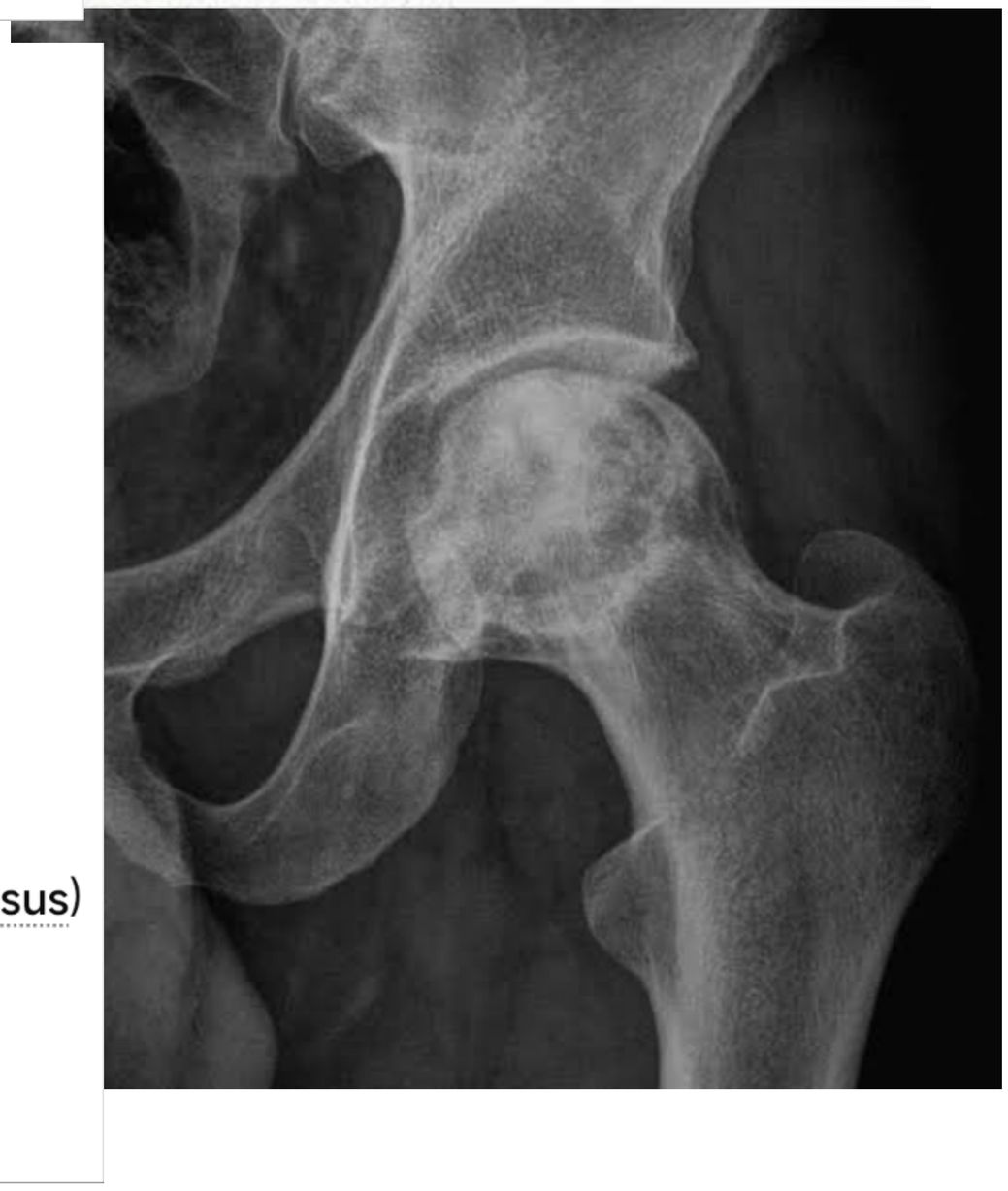
⚠️ Causes (Very Important)

🔹 Traumatic

- Fracture neck of femur
- Hip dislocation

🔹 Non-traumatic

- Prolonged steroid use
- Alcohol abuse
- Sickle cell disease
- Thalassemia
- Autoimmune diseases (e.g., Systemic Lupus Erythematosus)
- Decompression sickness
- Radiation
- Idiopathic



- Most common site: Head of femur
- Most common non-traumatic cause: Steroids
- Most sensitive investigation: MRI
- Most common symptom: Groin pain

📌(written) Patient underwent open appendectectomy
Now there is discharge from
What are 4 post op complication u would be worried about in this case
Immediate steps u would take
Wt are other investigations u would like to perform

*appendectomy:- complications: ↳ wound infection
↳ intra abdominal abscess
↳ wound dehiscence
↳ enterocutaneous fistules.
↳ hematoma.

immediate steps:- clinical assesmt (vitals, wound inspection)
Signs of peritonitis.

wound culture & sterile dressing
IV antibiotics, analgesics
surgical exploration if purulent or fecal discharge

Iv:- CBC, CRP, blood culture.
wound swab, culture & sensitivity
Ultrasound / CT abdomen if intraabdominal mass suspected

📌 (viva/interactive/ no patient) joint examination
And if patient has knee joint pain then wt would u be suspecting (d/ds)
And dmd gower sign wt is it ?

🦴 JOINT EXAMINATION (General Approach)

When asked "How will you examine a joint?"

1️⃣ Look

- Swelling
- Redness
- Deformity
- Muscle wasting
- Scars
- Sinuses
- Skin changes

2️⃣ Feel

- Temperature (compare both sides
- Tenderness (joint line?)
- Effusion
- Crepitus

3️⃣ Move

🔹 **Active movements**

Ask patient to move joint.

🔹 **Passive movements**

You move the joint yourself.

4️⃣ Special Tests

Depends on joint (e.g., knee ligaments, meniscus tests).

5️⃣ Always Examine:

- Joint above
- Joint below
- Neurovascular status

🦵 If Patient Has Knee Joint Pain – What Are You Suspecting? (D/Ds)

Depends on age 👇

👶 Child

- Septic arthritis (emergency 🚨)
- Transient synovitis
- Juvenile idiopathic arthritis
- Osgood-Schlatter disease

👩 Young Adult

- Ligament injury (ACL tear)
- Meniscal injury
- Patellofemoral pain syndrome
- Rheumatoid arthritis

👴 Elderly

- **Osteoarthritis** (most common)
- **Rheumatoid arthritis**
- Gout
- Pseudogout

🚨 If Red, Hot, Very Painful

Think:

- Septic arthritis
- Gout

🧬 DMD – Gower’s Sign

Related to Duchenne muscular dystrophy

What is Gower’s Sign?

When a child tries to stand from sitting or lying position:

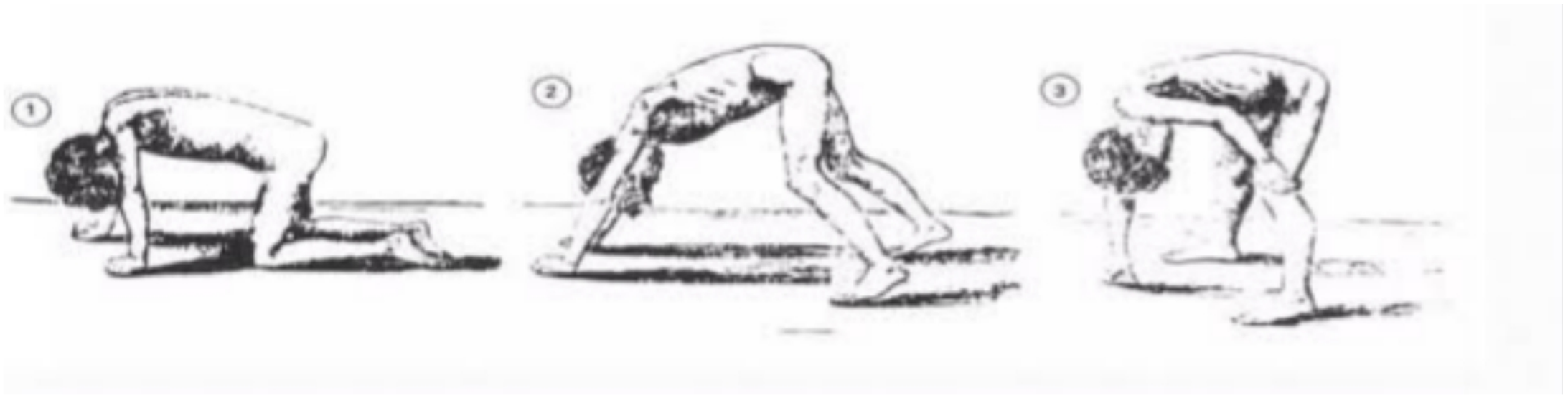
👉 He uses his hands to push on his thighs and “climbs up” his own body to stand.

Because:

- Proximal muscle weakness (hip & thigh muscles weak)

Why Does It Happen?

Due to degeneration of muscle fibers caused by absence of dystrophin protein.



derma station : psoriatic plaques on extensor upper limbs and scalp
Diagnoses(exact type)
Predisposing Factors
Aggravating factors
Treatment

Most likely: Plaque psoriasis (Chronic plaque psoriasis / Psoriasis vulgaris)

Clues:

- Well-demarcated erythematous plaques
- Silvery scales
- Extensor surfaces (elbows, knees)
- Scalp involvement

Predisposing Factors

- Genetic predisposition (HLA-Cw6 association)
- Family history
- Immune dysregulation (T-cell mediated)
- Obesity
- Metabolic syndrome

Aggravating / Triggering Factors

- Trauma (Koebner phenomenon)
- Stress
- Infections (especially streptococcal)
- Certain drugs:
- Beta blockers
- Lithium
- Antimalarials
- NSAIDs
- Cold weather
- Smoking & alcohol

Treatment

1. Mild disease
- Topical corticosteroids
- Vitamin D analogues (Calcipotriol)
- Coal tar preparations

2. Moderate
- Phototherapy (UVB)

3. Severe
- Methotrexate
- Cyclosporine
- Biologics (TNF-alpha inhibitors)

Duchene muscular dystrophy diagnosis
Pattern of inheritance
Treatment

Diagnosis

Duchenne muscular dystrophy

Clues:

- Progressive proximal muscle weakness
- Gowers' sign
- Calf pseudohypertrophy
- Onset in early childhood (3–5 years)
- Very high CK levels

Pattern of Inheritance

- X-linked recessive
- Affects boys
- Mutation in dystrophin gene (Xp21)

Treatment

(No cure – supportive)

- Corticosteroids (Prednisolone, Deflazacort)
- Physiotherapy
- Cardiac monitoring (risk of cardiomyopathy)
- Respiratory support (later stages)
- Genetic counseling

dx muscle biopsy CK level EMG per for dystrophin gene

- Nenonatal hypoglycemia/ nenonatal hyperinsulinemia
- Complications in baby born to a diabeteic mother
- Treatment

1️⃣ Neonatal Hypoglycemia / Neonatal Hyperinsulinemia

Cause (Most common in exam scenario):

Baby born to a diabetic mother → maternal hyperglycemia → fetal pancreas produces excess insulin → after birth glucose supply stops but insulin remains high → hypoglycemia

This is called neonatal hyperinsulinemic hypoglycemia.——

Clinical Features

- Jitteriness
- Poor feeding
- Lethargy
- Apnea
- Seizures
- Hypotonia

Complications

- Seizures
- Brain injury
- Developmental delay
- Permanent neurological damage if prolonged

2️⃣ Complications in Baby Born to a Diabetic Mother (IDM)

Metabolic

- Hypoglycemia (most common)
- Hypocalcemia
- Hypomagnesemia
- Polycythemia → hyperbilirubinemia

Respiratory

- Respiratory distress syndrome (delayed lung maturity)

Cardiac

- Hypertrophic cardiomyopathy (septal hypertrophy)

Congenital anomalies

- Neural tube defects
- Congenital heart disease
- Caudal regression syndrome

Others

- Macrosomia
- Birth trauma (shoulder dystocia)

1️⃣ Initial Confirmation of Hypoglycemia

- Plasma glucose (critical sample when symptomatic):
- Neonatal hypoglycemia: <45 mg/dL in first 48 hours, <50 mg/dL after 48 hours

3️⃣ Treatment of Neonatal Hypoglycemia

Immediate Management

1. Check blood glucose
2. If symptomatic OR glucose <40 mg/dL:
   - IV bolus 10% dextrose (2 mL/kg)
   - Then continuous infusion (6–8 mg/kg/min)

If mild/asymptomatic

- Early feeding (breast/formula)

Persistent hyperinsulinism

- Diazoxide
- Octreotide (if refractory)

neonatal examination
general physical examination in peadiatrics and adults
hand and wrist examination
counselling for minor thalasemia

Ulner nerve examination
Rheamautid hand examination
General physical examination steps

RTA patient ATLS protocol

- ~~cause of death~~ regardless of age.
- Advanced Trauma Life Support (ATLS) is the cornerstone of management of a trauma patient.
- ATLS principles are:
  - Primary survey:
    - A - Airway maintenance with cervical spine protection
    - B - Breathing and ventilation
    - C - Circulation with hemorrhage control
    - D - Disability: neurologic status
    - E - Exposure & Environmental Control
  - Secondary Survey – detailed head-to-toe examination
  - Transfer to a definite site of care

III. Secondary Survey:

- It is detailed head-to-toe examination of patient once all the immediate life-threatening conditions have been addressed.
- In unstable patients, who are transferred to OR directly after primary survey, a secondary survey is needed post-operatively.
- Secondary survey consists of:
  - History – mnemonic: AMPLE
    - Allergies
    - Medications
    - Past-medical history
    - Pregnancy
    - Last meal
  - Head & Maxillofacial Examination:
    - Re-evaluate GCS
    - Re-evaluate pupils
    - Evaluate cranial nerves
    - Examine eyes – penetrating injury, foreign bodies, contact lenses
    - Examine ears – penetrating injury, CSF leak, hemotympanum
    - Examines nose – penetrating injury, CSF leak,
    - Examine face - assess maxilla and mandible
  - C-spine & Neck:
    - Obtain 2-view x-ray of cervical spine or CT c-spine
    - Examine the neck for:
      - Inspect for signs of blunt and penetrating trauma
      - Position of trachea
      - Swelling, hematoma
      - Subcutaneous emphysema
      - Assess and auscultate carotid pulses
  - Detailed examination of chest
  - Detailed examination of abdomen
  - Detailed examination of upper extremity
  - Detailed examination of lower extremity
  - Assess perineum, rectum, and vagina
  - Detailed neurologic examination

2. Adjuncts / Investigations in RTA

- **Monitoring:** ECG, pulse oximetry, BP, urine output
- **Imaging:**
  - FAST / eFAST (hemoperitoneum, hemothorax, cardiac tamponade)
  - Chest X-ray, pelvis X-ray
  - CT scan if stable, for head, spine, chest, abdomen
- **Lab tests:** CBC, electrolytes, coagulation profile, type & crossmatch

Compartment syndrome

- **Compartment Syndrome:** Increased pressure within a closed muscle compartment → compromises **circulation and tissue viability**
- Can lead to **ischemia, necrosis, and permanent dysfunction** if untreated

2. Etiology / Causes

Cause Type	Examples
Trauma (most common)	Fractures (tibial, forearm), crush injuries
Iatrogenic	Tight casts, dressings, prolonged surgery
Vascular	Reperfusion injury, burns, hemorrhage
Other	Snake bites, severe infection, vigorous exercise

3. Pathophysiology

1. Increased compartment pressure
2. Decreased **capillary perfusion** → ischemia
3. Muscle & nerve injury within **6–8 hours** if untreated
4. **Irreversible damage** after 8–12 hours

4. Clinical Features ("6 Ps")

1. **Pain** – severe, **out of proportion**, worsens with passive stretch
2. **Paresthesia** – tingling or numbness
3. **Pallor** – pale skin distal to compartment
4. **Paralysis** – late sign, weakness of muscles in compartment
5. **Pulselessness** – rare, very late sign
6. **Poikilothermia** – limb feels cold

💡 **Most sensitive early sign: pain out of proportion**

Diagnosis

- **Clinical diagnosis** is primary
- **Compartment pressure measurement:**
  - 30 mmHg or within 30 mmHg of diastolic BP → surgical emergency
- **Labs / imaging:** supportive only (creatine kinase, myoglobinuria, x-ray for fractures)

6. Complications

- **Muscle necrosis** → Volkmann's contracture
- **Permanent nerve damage**
- **Rhabdomyolysis → acute kidney injury**
- Infection
- Chronic pain / limb dysfunction

7. Management

A. Immediate / Emergency

- **Remove constrictive dressings / casts**
- **Position limb at heart level** (not above)
- **Oxygenation & analgesia**
- **Monitor neurovascular status** frequently

B. Definitive Treatment

- **Emergent fasciotomy** – only definitive treatment
  - Decompress all involved compartments
  - Leave wound open, delayed closure or skin graft later

C. Supportive Care

- IV fluids to prevent renal injury (especially if rhabdomyolysis)
- Pain control
- Monitor urine output and electrolytes

Match the disease to investigation:
Psoriatic arthritis: Pencil in cup deformity
Polymyositis: EMG
Antiphospholipid syndrome: Anticardiolopin/lupus anticoagulant
Sjogren’s: Anti SSA/Anti SSB
Reactive arthritis: HLA-B27
Giant cell arteritis: Temporal artery biopsy

Pancytopenia scenario
All cells decrease
No lymphadenopathy no heaptospleenomegaly

Diagnosis Aplastic anemia
Definitive test to confirm Diagnosis??bone marrow biopsy

Treatment and management

- Diagnosis:
  - CBC = pancytopenia
  - Bone marrow biopsy:
    - It is the most accurate method.
    - It shows hypocellularity, and contain fat cells

Treatment:

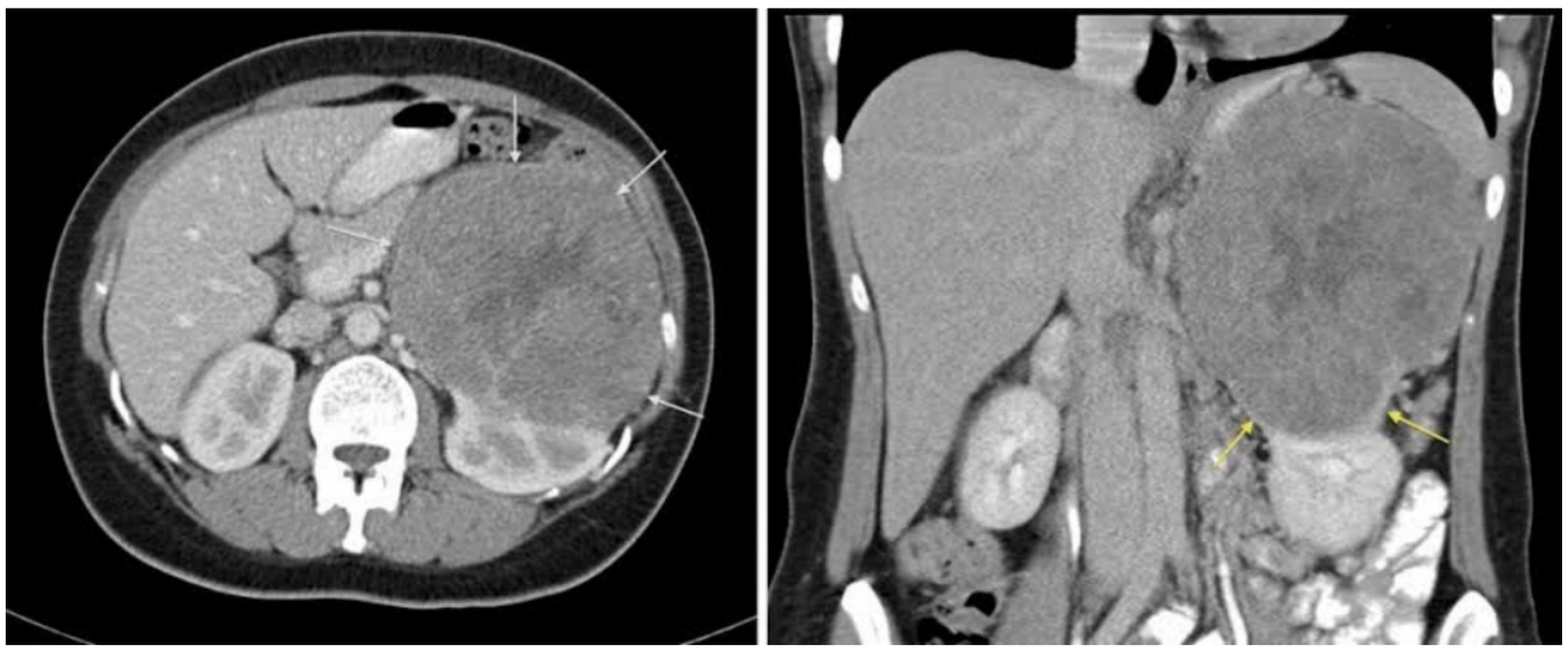
- Supportive:
  - Anemia = blood transfusion
  - Infection = antibiotics
  - Bleeding = platelets
- Young patients (< 30 years) = allogeneic bone marrow transplantationis curative
- Old patients = immunosuppressive therapy with cyclosporin and anti-thymocyte globulin

cells

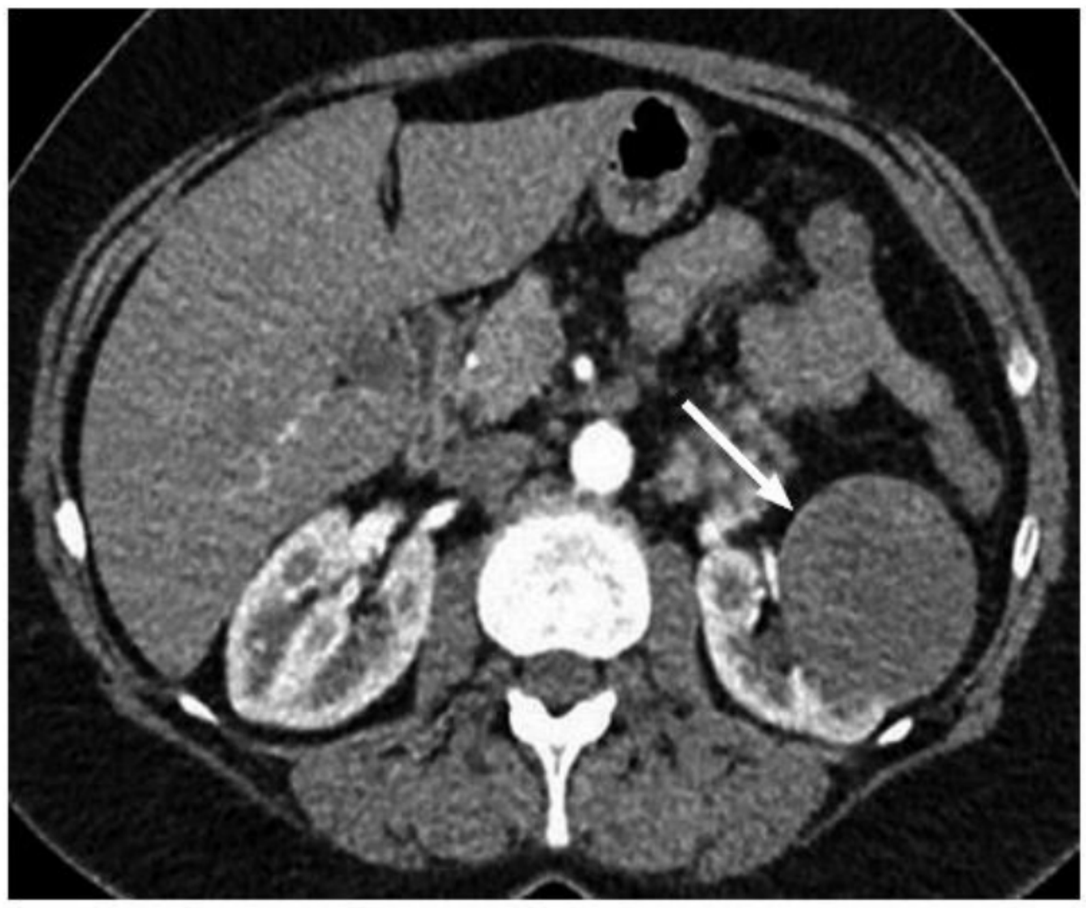
Causes:

- Idiopathic = most common
- Inherited = Fanconi anemia
- Drugs :
  - Most common known cause.
  - Alkylating agents
  - Chloramphenicol
  - Streptomycin
- Infections:
  - Cytomegalovirus
  - Epstein-Barr virus
  - Hepatitis
  - Varicella Zoster

CT abdomen showing renal cell carcinoma



further question
name investigative
what abnormal finding
staging of carcinoma
management



1. Further Investigations

A. Laboratory Tests

- CBC, renal function (BUN, creatinine), electrolytes
- Liver function tests (for metastasis)
- Urinalysis (hematuria, proteinuria)
- Serum calcium (hypercalcemia in paraneoplastic syndrome)

B. Imaging

1. **CT Abdomen with contrast** – already done; best for diagnosis and local staging
2. **MRI** – if renal vein/IVC involvement suspected or contrast contraindicated
3. **Chest CT** – rule out pulmonary metastasis
4. **Bone scan** – if bone pain or elevated alkaline phosphatase
5. **Ultrasound** – initial screening if needed

C. Other

- **Renal biopsy** – sometimes done if diagnosis uncertain or before systemic therapy

2. Typical Abnormal CT Findings in RCC

- **Solid renal mass** (often heterogeneous due to necrosis/hemorrhage)
- **Contrast enhancement** (RCC is usually hypervascular)
- **Calcifications** in ~10–20%
- **Invasion**: renal vein, IVC, perinephric fat
- **Metastasis**: liver, lungs, bone

3. Staging (TNM, AJCC 8th edition)

Stage	Description
T1	Tumor ≤7 cm, confined to kidney
T2	Tumor >7 cm, confined to kidney
T3	Tumor extends into major veins or perinephric tissue, but not beyond Gerota's fascia
T4	Tumor invades beyond Gerota's fascia (adrenal gland, adjacent organs)

N: Regional lymph nodes involvement
M: Distant metastasis (lung, bone, liver, brain)

Example: T1N0M0 → localized small RCC

4. Management of RCC

A. Localized Disease (T1–T2, N0M0)

- **Surgical resection (curative)**
  - **Partial nephrectomy** (nephron-sparing, preferred if feasible)
  - **Radical nephrectomy** (entire kidney, perinephric fat, Gerota's fascia)

B. Locally Advanced Disease (T3–T4)

- **Radical nephrectomy ± thrombectomy** (if renal vein/IVC involvement)
- **Adjuvant targeted th ↓ or immunotherapy** in selected cases

C. Metastatic RCC

- **Targeted therapy:** tyrosine kinase inhibitors (sunitinib, pazopanib)
- **Immunotherapy:** checkpoint inhibitors (nivolumab, pembrolizumab)
- **Palliative care** if poor performance status

D. Supportive Measures

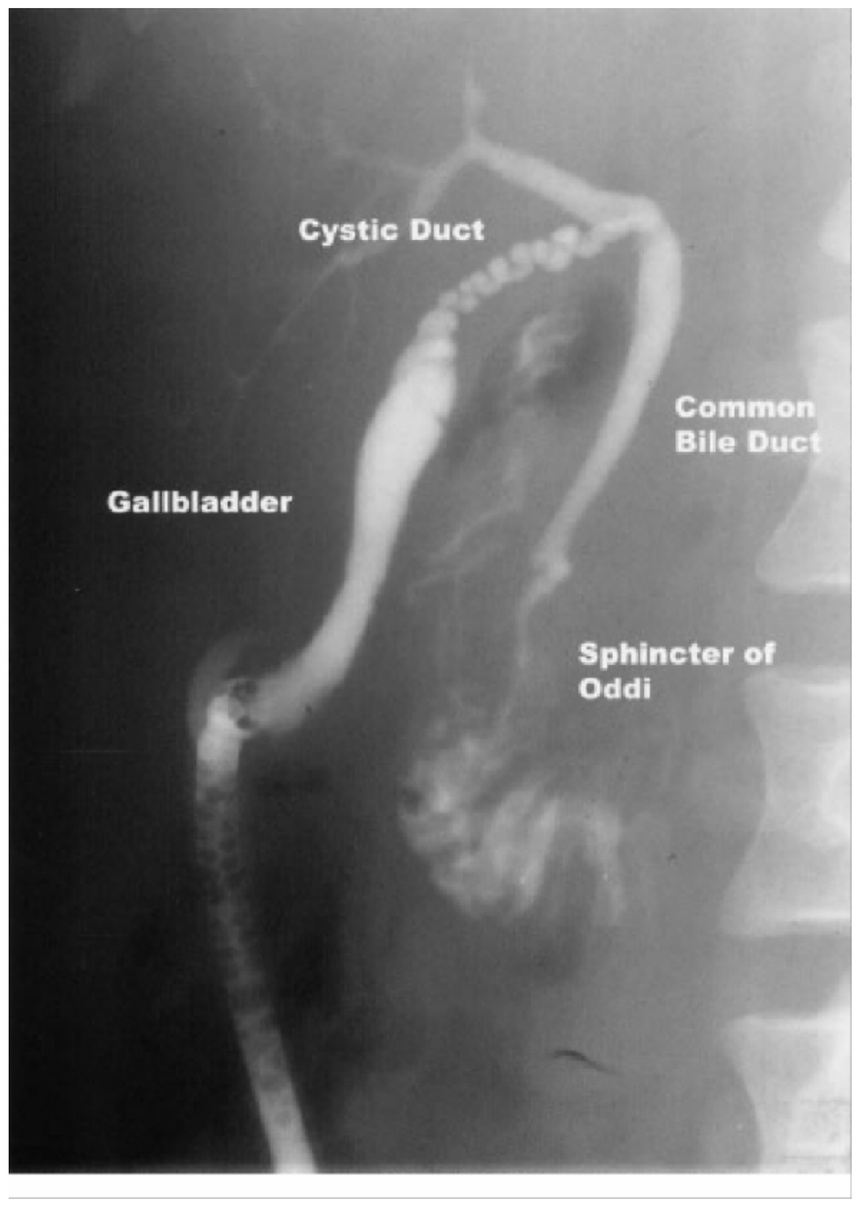
- Pain management, blood pressure control, hydration
- Monitor renal function

💡 **Key Points for Station/OSCE:**

1. **CT scan** shows **hypervascular renal mass**
2. **Next steps:** labs, staging imaging (chest CT, bone scan)
3. **Stage using TNM**

Person develop complications after cholecystectomy

And Cholangiogram picture done
Showing empty gallbladder Fossa
And identification land marks



🩺 Complications After Cholecystectomy

🔴 Early Complications

- **Bile leak** (most common early)
- Hemorrhage
- Injury to Common Bile Duct (CBD)
- Subhepatic abscess
- Wound infection

🟡 Late Complications

- CBD stricture
- Retained CBD stone
- Post-cholecystectomy syndrome

🧭 Identification Landmarks on Cholangiogram (Very Important for OSPE)

You should be able to point out:

1️⃣ **Common Hepatic Duct (CHD)**
2️⃣ **Cystic duct stump** (short blind-ending duct)
3️⃣ **Common Bile Duct (CBD)**
4️⃣ **Right hepatic duct**
5️⃣ **Left hepatic duct**
6️⃣ **Ampulla of Vater**
7️⃣ **Contrast entering duodenum**

If contrast is leaking → suspect **bile leak**
If there is narrowing → suspect **CBD stricture**
If filling defect → suspect **retained stone**

🩻 If Cholangiogram Shows:**

- Contrast extravasation → Bile leak
- Narrowed distal CBD → Stricture
- Round filling defect → CBD stone
- No contrast in duodenum → Obstruction

Thalassemia minor Station scenerio
Sir k samnay
Inheritance
Management
Advice

Inheritance is autosomal recessive

4. Management

- **No active treatment required**
- **Avoid unnecessary iron therapy** (unless proven iron deficiency)
- **Folic acid supplementation** may be advised if mild anemia present

---

5. Advice / Counseling

- **Genetic counseling:** important if planning children
- **Screen spouse** for carrier status
- **Reassurance:** usually benign, normal lifespan
- **Avoid unnecessary investigations or treatments**

Tinea lesion
Identification
Treatment
Types of tinea
Role of steroids in tinea

3. Types of Tinea (Based on Site)

Site	Common Name	Typical Featur
Scalp	Tinea capitis	Patchy hair los black dots, infl
Body	Tinea corporis	Ring-shaped, s plaques with c clearing
Groin	Tinea cruris	Jock itch; groir thighs; spares
Feet	Tinea pedis	Interdigital sca moccasin patt blisters
Hands	Tinea manuum	One hand, chrc scaling
Nails	Tinea unguium / onychomycosis	Thickened, dis nails

2. Treatment of Tinea

A. General Measures

- Keep affected area **dry and clean**.
- Avoid occlusive clothing.
- Avoid sharing towels, clothes, or shoes.

B. Topical Antifungals

- **First-line:** Terbinafine 1%, Clotrimazole 1%, Miconazole 2%, Ketoconazole 2%
- **Duration:** Usually 2–4 weeks; extend 1–2 weeks after lesion resolution.
- Apply **thin layer 1–2 times daily**.

C. Systemic Antifungals

- Indicated for **extensive, resistant, nail, or scalp tinea**.
- **Drugs:**
  - Terbinafine (oral) – first choice
  - Itraconazole – alternative
  - Griseofulvin – especially for children with tinea capitis

4. Role of Steroids in Tinea

- **Topical steroids alone: Not recommended**; they suppress inflammation but **do not kill fungus**, often leading to "tinea incognito" (atypical appearance with minimal scaling, more widespread lesions).
- **Steroid-antifungal combinations:**
  - Sometimes used for short periods if intense inflammation is present.
  - Long-term use is harmful and can **mask symptoms, delay healing, and cause rebound**.
- **Key point:** Avoid potent steroids in tinea; always combine with antifungals if needed.

Seborrheic Dermatitis

Definition

A **chronic inflammatory skin disorder** affecting areas rich in sebaceous glands, associated with **Malassezia yeast** overgrowth.

Common in:

- Infants (cradle cap)
- Young adults
- HIV patients
- Parkinson's disease

Etiology / Risk Factors

- Malassezia furfur (yeast)
- Oily skin
- Stress
- Cold weather
- Immunosuppression (especially HIV)
- Neurological disease (Parkinson's)

Clinical Features

🔹 Lesions

- **Erythematous patches**
- **Greasy yellow scales**
- Mild itching

🔹 Common Sites

- Scalp (dandruff)
- Eyebrows
- Nasolabial folds
- Behind ears
- Chest (sternal area)

In infants:

- Thick yellow crust on scalp → "Cradle cap"

Differential Diagnosis

- Psoriasis (thicker silvery scales)
- Tinea capitis
- Atopic dermatitis
- Contact dermatitis

Management

🔹 1️⃣ Scalp Treatment

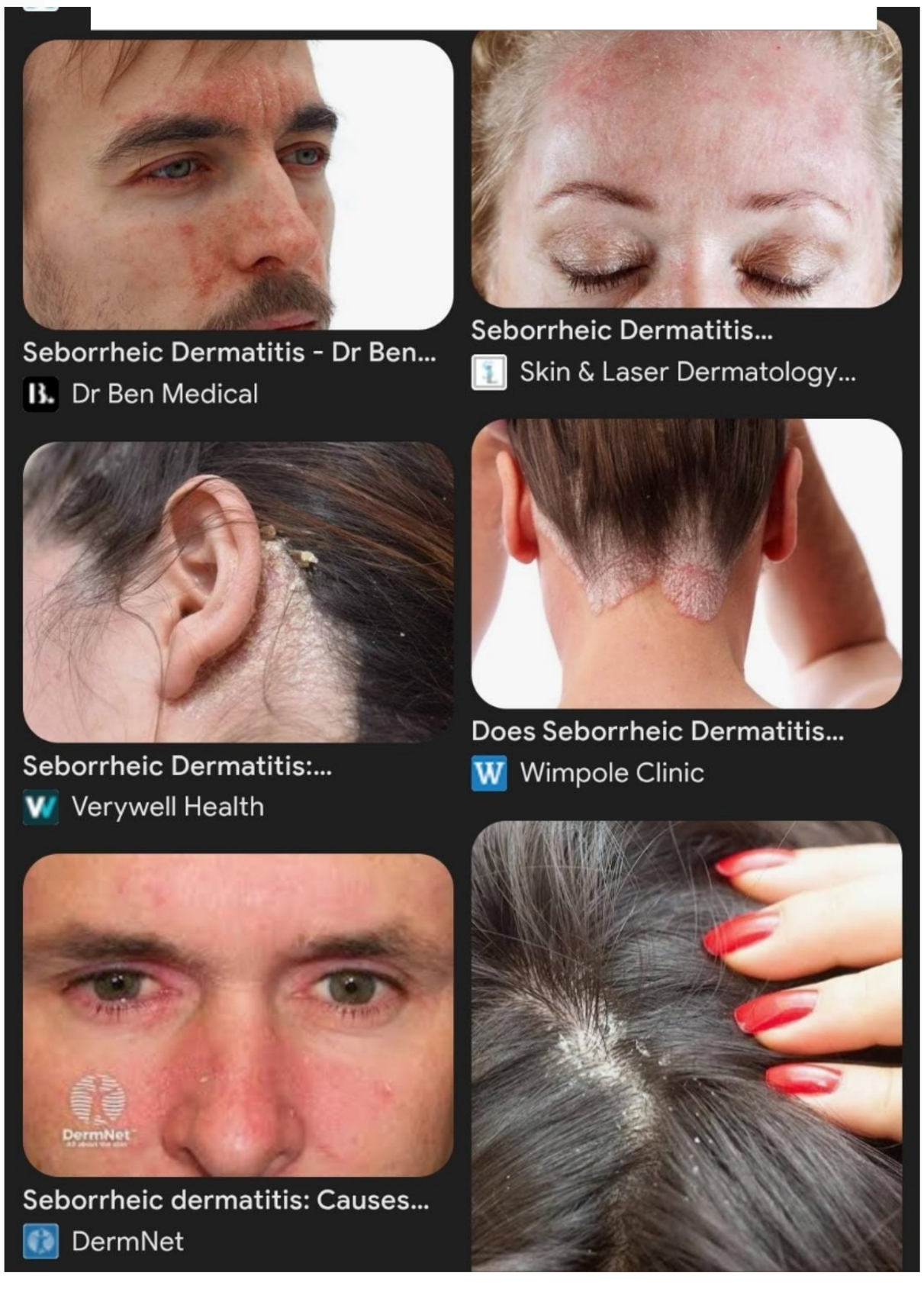
- Ketoconazole shampoo
- Selenium sulfide shampoo
- Zinc pyrithione shampoo
- Use 2–3 times per we

🔹 2️⃣ Face / Body Treatment

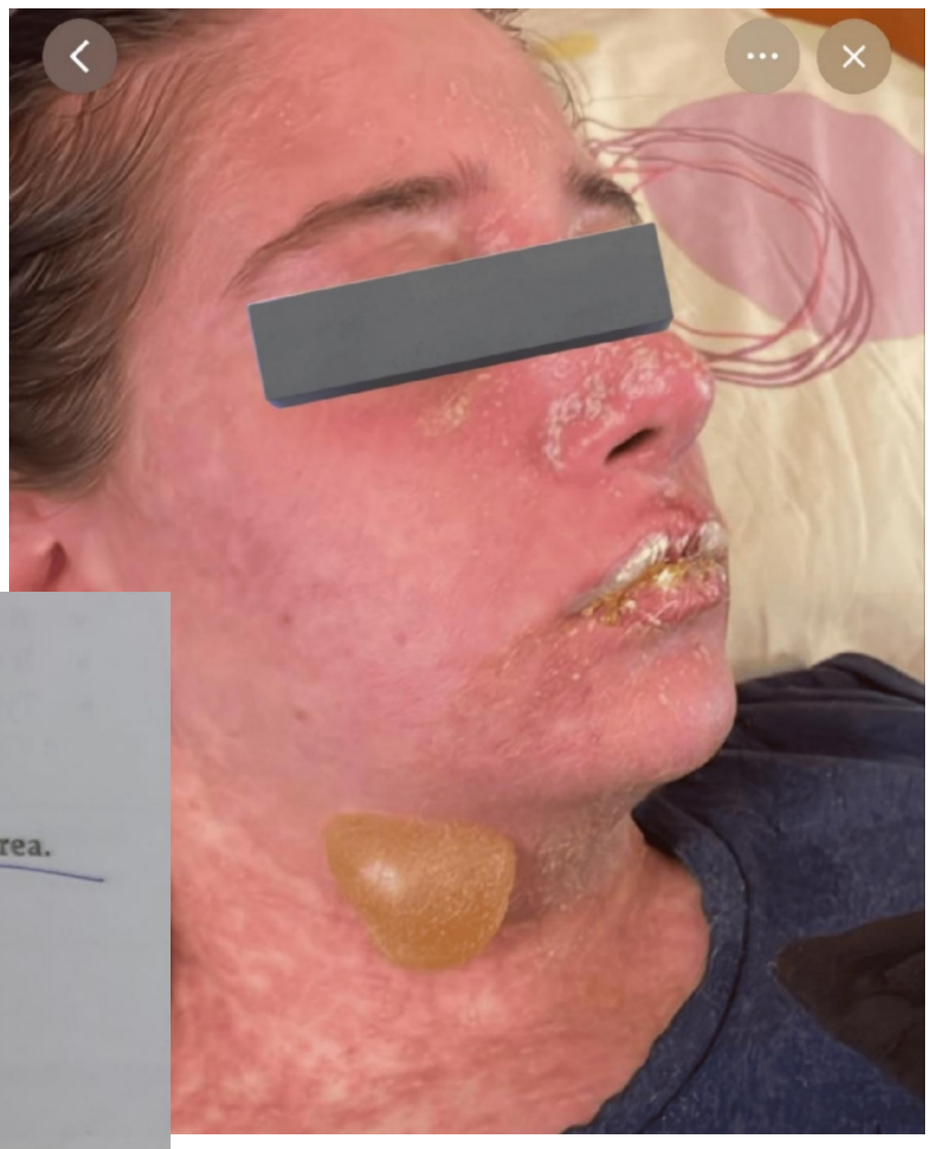
- Topical antifungal creams (ketoconazole)
- Mild topical steroids (short course only)
- Topical calcineurin inhibitors (tacrolimus) for face

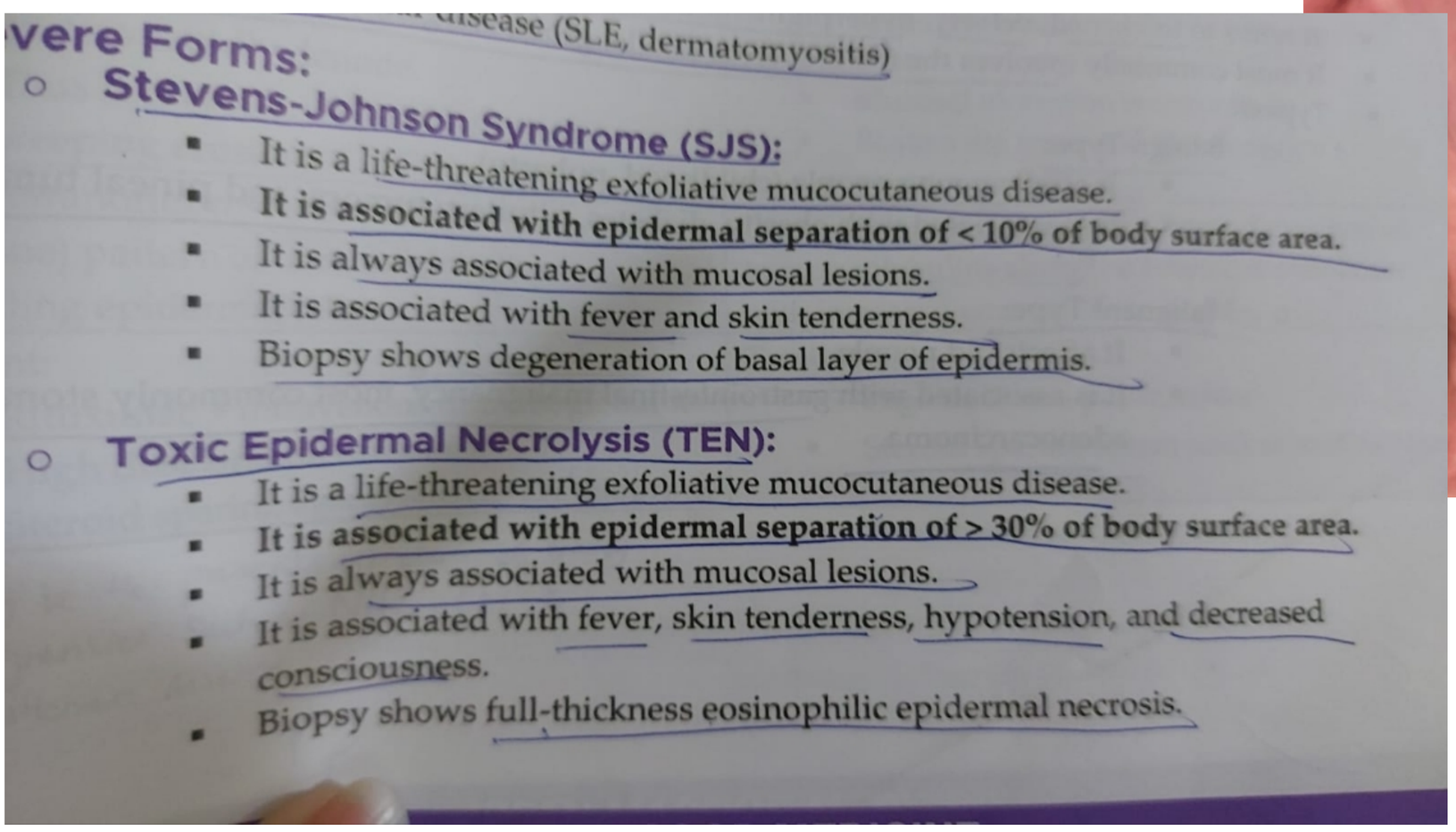
🔹 3️⃣ Severe Cases

- Oral antifungals (rarely needed)



identify TEN
diffenrnve between TEN and SJs
Name two drug rash
management of SJs





vere Forms:

- Stevens-Johnson Syndrome (SJS):
  - It is a life-threatening exfoliative mucocutaneous disease.
  - It is associated with epidermal separation of < 10% of body surface area.
  - It is always associated with mucosal lesions.
  - It is associated with fever and skin tenderness.
  - Biopsy shows degeneration of basal layer of epidermis.
- Toxic Epidermal Necrolysis (TEN):
  - It is a life-threatening exfoliative mucocutaneous disease.
  - It is associated with epidermal separation of > 30% of body surface area.
  - It is always associated with mucosal lesions.
  - It is associated with fever, skin tenderness, hypotension, and decreased consciousness.
  - Biopsy shows full-thickness eosinophilic epidermal necrosis.

Stevens-Johnson syndrome

- Severe, acute mucocutaneous reaction usually triggered by drugs or infections.
- Characterized by widespread skin and mucous membrane necrosis and detachment.
- Considered SJS if <10% body surface area (BSA) involved, and Toxic Epidermal Necrolysis (TEN) if >30% BSA.

2️⃣ Common Causes

- Drugs (most common):
- Sulfonamides, anticonvulsants (phenytoin, carbamazepine), allopurinol, NSAIDs
- Infections:
- Mycoplasma pneumoniae, viral infections
- Idiopathic: Sometimes no cause identified

3️⃣ Clinical Features

- Prodrome: fever, malaise, sore throat, cough
- Skin:
- Erythematous macules → target lesions → bullae → epidermal detachment
- Painful, tender
- Mucous membranes:
- Oral ulcers, conjunctivitis, genital erosions
- Nikolsky sign: skin peels off with slight pressure

4️⃣ Investigations

- Mainly clinical diagnosis
- Supportive labs to assess complications:
- CBC, electrolytes
- Renal and liver function
- Culture if secondary infection suspected

5️⃣ Management

Supportive care is mainstay:

- Stop offending drug immediately
- Hospitalize (preferably in burn unit for severe cases)
- Fluid and electrolyte management
- Wound care (non-adhesive dressings)
- Pain control
- Mucous membrane care (eye drops, oral hygiene)
- Systemic therapy controversial:
- IVIG or corticosteroids in selected cases

fracture humerus
complication
management

A. General Principles

- **Immobilization** – splint initially, sling or functional brace later
- **Pain control** – analgesics
- **Neurovascular monitoring** – assess pulses and nerve function

B. Site-Specific Management

1. Proximal Humerus Fracture

- **Non-displaced/minimally displaced:** Sling + early passive shoulder mobilization
- **Displaced / complex fractures:** Surgical fixation (ORIF, intramedullary nailing, or hemiarthroplasty)

2. Humeral Shaft Fracture

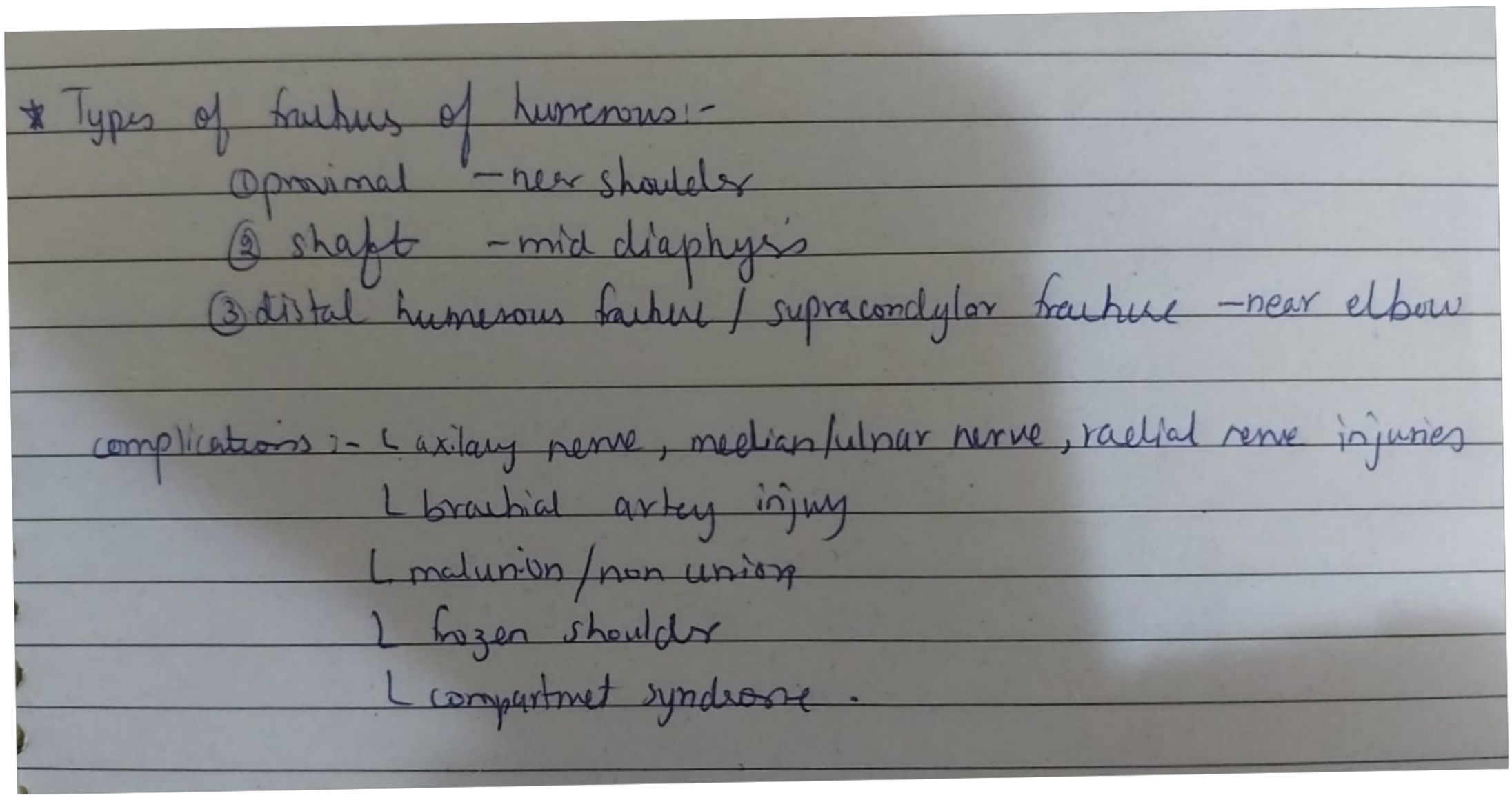
- **Most fractures:** Functional brace (Sarmiento brace)
- **Indications for surgery:**
  - Open fractures
  - Vascular injury
  - Pathologic fracture
- **Most fractures:** Functional brace (Sarmiento brace)
- **Indications for surgery:**
  - Open fractures
  - Vascular injury
  - Pathologic fracture
  - Unstable or non-union

3. Distal Humerus / Supracondylar Fracture

- **Children:** Closed reduction + percutaneous pinning (CRPP)
- **Adults:** ORIF (plate and screws)

C. Rehabilitation

- Early **range of motion exercises** once stable
- Avoid stiffness, especially shoulder/elbow
- Physiotherapy for muscle strengthening



Radial Head Fracture:

This fracture is also caused by fall on outstretched hands. Fracture has been classified by mason as:

Type I: Undisplaced partial articular.
Type II: Displaced partially articular.
Type III: Comminuted fracture.

Treatment:

- Small and minimally displaced fragments are treated non operatively by temporary collar and cuff.
- Large fragments or major displacement which blocks movements require open reduction with internal fixation (ORIF).
- If fixation is not possible radial head can be excised.

Olecranon fracture:

It is also caused by fall on the elbow point.

Treatment:

- Undisplaced fracture is treated conservatively.
- Extra-articular and two part intra-articular fractures are treated by tension band wiring.
- Comminuted fracture is treated by plate fixation.

Forearm Fractures:

Most of the fractures involve both bones (Radial and Ulna). Single bone injuries can occur but are uncommon. These fractures are caused by direct trauma to the bone or by fall on outstretched hand.

Treatment:

Adults:

In adults fractures are usually displaced and open reduction and internal fixation with plates is indicated. Plates are applied to both bones via separate incision.

Children:

In children close reduction with cast fixation can be sufficient.

Complications:

- Mal-Union
- Non-Union
- Compartment syndrome.
- Re-fracture (First 6 Months)

Montegia Fracture:

Fracture of proximal ulna with dislocation of radial head is called Montegia fracture. It is relatively uncommon and occurs during forced pronation of forearm or direct blow on back of upper forearm.

Geleazzi fracture:

It is fracture of shaft of radius usually at junction of middle and lower third, with dislocation of distal ulna. It often occurs due to fall on hand.

Management of Montegia and Galeazzi fractures:

Perfect reduction can never be obtained by closed method, so these fractures are treated by open reduction and internal fixation (ORIF).

COLLE'S FRACTURE:

Fracture of radius with in 2.5 cm of wrist joint. It is extra-articular fracture with dorsal and radial displacement of distal segment. It usually occurs in elderly females with osteoporotic bones. **Dinner fork deformity** is classical deformity of Colles fracture.

Complications of Colles Fracture:

- Median nerve injury.
- Malunion.
- Rupture of extensor pollicis longus tendon.
- Sudeck's atrophy.
- Joint stiffness.

Treatment:

Most of the time fracture can be treated by non operative methods. Close reduction is carried out under anesthesia and cast is applied. Operative treatment is rarely needed.

SMITH FRACTURE:

This is reverse of Colles fracture. It is an extra-articular distal radial fracture with ventral (volar) displacement of distal segment. It usually occurs as a result of fall on to the dorsum of the hand. Treatment is same us Colles fracture.

Scaphoid Fracture:

The most commonly fractured wrist bone is the Scaphoid and is fractured by fall on outstretched hand. The fracture can be easily missed as it causes little pain, swelling and deformity and does not always show clearly on plain radiographs. If the doubt remains the wrist should be immobilized and radiographs should be repeated after two weeks. If there is still doubt, the isotope bone scan and MRI confirm the diagnosis.

Treatment:

- Undisplaced fracture is treated by plaster immobilization of wrist.
- Displaced, unstable and proximal pole fractures are treated by internal fixation.

Complications Include Avascular necrosis of proximal pole, osteoarthritis, delayed union and non-union.

written scenarios chalongiocarcinoma
investigation
complication
treatment

1. Written Scenario (Clinical Presentation)

> **Scenario Example:**
> A 62-year-old man presents with **painless jaundice**, dark urine, and generalized itching for 3 weeks. He also reports **weight loss and fatigue**. On examination, he has **icterus** and mild right upper quadrant tenderness. Liver function tests show **elevated bilirubin (direct), ALP, and GGT**. Ultrasound shows **intrahepatic bile duct dilatation** without gallstones.

Key clues in exam scenarios:

- **Painless obstructive jaundice** – classical presentation
- **Pruritus** – due to bile salt deposition
- **Weight loss** – malignancy clue
- **Cholestatic LFT pattern**: ↑ ALP, ↑ GGT, ↑ direct bilirubin
- **Palpable mass**: Occasionally in advanced disease

A. Blood Tests

- **Liver function tests:** Cholestatic pattern
- **Tumor markers:**
  - **CA 19-9** – elevated in cholangiocarcinoma
  - CEA – less specific

B. Imaging

- **Ultrasound:** First-line; may show bile duct dilation or mass
- **CT scan / MRI (MRCP):** Defines tumor location, extent, vascular involvement
- **ERCP (Endoscopic Retrograde Cholangiopancreatography):**
  - Can visualize stricture
  - Allows **biopsy or brush cytology**
- **Percutaneous transhepatic cholangiography (PTC):** Alternative if ERCP not possible

C. Histopathology

- **Biopsy** confirms diagnosis
- Usually **adenocarcinoma of bile duct epithelium**

Treatment

- **Surgical resection:** Only 10–30% are operable at diagnosis
  - **Hilar tumors:** Resection of bile ducts ± partial hepatectomy
  - **Distal tumors:** Pancreaticoduodenectomy (Whipple procedure)

B. Palliative

- **Biliary drainage** – ERCP stenting or percutaneous stent for obstructive jaundice
- **Radiotherapy / Chemotherapy:** Gemcitabine + cisplatin for unresectable cases
- **Supportive care:** Relief of pruritus, nutrition, pain management

C. Liver Transplant

- Select cases of **hilar cholangiocarcinoma** may be eligible after neoadjuvant therapy

osteoporosis.
investigation t score bhi sun rhy rhy
management
finding on xray compression fracture ky bary main btana tha

Definition

A systemic skeletal disorder characterized by **low bone mass and microarchitectural deterioration**, leading to **increased fracture risk**.

Investigations

* DEXA - Most accurate test measures bone mineral density
* Serum Ca, Vitamin D, PTH
* Renal function, LFTs, TFTs, Anti TTG antibodies (celiac disease)

T-Score Value	Risk Category
> 1.0	High BMD
-1.0 to 1.0	Normal BMD
-2.5 to -1.0	Osteopenia
< -2.5	Osteoporosis

Management

* Bisphosphonates
* Denosumab
* PTH
* Calcium and Vitamin D
* Hormone replacement therapy

Selective Estrogen receptor modulators

Elbow fracture, management

Elbow Fractures

Elbow fractures commonly involve:

1. **Supracondylar fracture (humerus)** – common in children
2. **Radial head fracture** – common in adults
3. **Olecranon fracture**
4. **Distal humerus fracture**

1️⃣ Supracondylar Fracture (Most Important in Exams)

📌 **Common in: Children (5–10 years)**

📌 **Mechanism: Fall on outstretched hand**

Clinical Features:

- Pain, swelling around elbow
- Deformity
- Check **radial pulse** (r… brachial artery injury)
- Check median nerve function

Complications:

- **Brachial artery injury**
- **Median nerve injury**
- Compartment syndrome → **Volkmann's ischemic contracture**
- Malunion → **Cubitus varus (gunstock deformity)**

Management:

- **Non-displaced:** Above elbow cast
- **Displaced:** Closed reduction + percutaneous pinning (CRPP)
- If vascular compromise → urgent surgery

2️⃣ Radial Head Fracture

📌 **Common in adults**

📌 **Mechanism: Fall on outstretched hand**

Clinical:

- Lateral elbow pain
- Pain on forearm rotation

Management:

- Non-displaced → Sling + early mobilization
- Displaced → ORIF or radial head replacement

3️⃣ Olecranon Fracture

📌 **Mechanism: Direct trauma or fall**

Clinical:

- Posterior elbow swelling
- Inability to extend elb… riceps disruption)

4️⃣ Distal Humerus Fracture (Adults)

- Often intra-articular
- Managed with **ORIF (plate and screws)**

General Management Principles

- ABC if trauma case
- Analgesia
- X-ray AP + lateral view
- Neurovascular assessment (before & after reduction)
- Immobilization
- Early physiotherapy to prevent stiffness

Examination of a neonate with pallor conjuntiva, jaundiced examine

Steven johson syndrome, differences btw steven jonson and ten , other types of drug rashes , tx of steven johnson

🔴 Stevens–Johnson syndrome (SJS)

A **severe, life-threatening mucocutaneous hypersensitivity reaction**, usually triggered by drugs. It is part of a spectrum with **TEN**.

📌 Difference between SJS and TEN

Both are on the same disease spectrum.

Feature	SJS	TEN (Toxic Epidal Necrolysis)
BSA detachment	**<10%**	**>30%**
Overlap	10–30%	—
Mucosal involvement	Almost always	Almost always
Mortality	~5–10%	30–50%
Severity	Severe	Very severe

👉 Main difference = **percentage of skin detachment**

🔥 Common Causes (Very Important for Exams)

💊 Drugs (most common)

- Sulfonamides
- Antiepileptics (carbamazepine, phenytoin, lamotrigine)
- Allopurinol
- NSAIDs (oxicam group)
- Nevirapine

🦠 Infections

- Mycoplasma (especially in children)

⚠️ Clinical Features of SJS

1. **Prodrome (1–3 days before rash)**
    - Fever
    - Malaise
    - Sore throat
    - Cough
2. **Skin findings**
    - Painful erythematous macules
    - Target-like lesions (atypical)
    - Blistering
    - Skin detachment
    - Positive **Nikolsky sign**
3. **Mucosal involvement (hallmark)**
    - Oral ulcers
    - Conjunctivitis
    - Genital erosions

🏥 Management of SJS (Very Important)

🚨 This is a **medical emergency**

1️⃣ Stop the offending drug immediately (MOST IMPORTANT STEP)

2️⃣ Admit to ICU / Burn unit

3️⃣ Supportive Care (mainstay)

- IV fluids (prevent dehydration)
- Electrolyte correction
- Temperature regulation
- Wound care (like burn patient)
- Pain control
- Nutritional support
- Strict infection monitoring

4️⃣ Eye care

- Lubricants
- Ophthalmology referral

5️⃣ Specific therapies (controversial but used)

- IVIG
- Systemic corticosteroids (early stage)
- Cyclosporine (in some centers)

🌸 Other Types of Drug Rashes (Exam Favourite)

1️⃣ Morbilliform (Maculopapular) Rash

- Most common
- Symmetrical red rash
- No mucosal involvement

2️⃣ Urticaria

- Itchy wheals
- Can progress to anaphylaxis

3️⃣ Fixed Drug Eruption

- Reappears at same site
- Well-defined round patch
- Common on lips/genitals

4️⃣ DRESS Syndrome

(Drug Reaction with Eosinophilia and Systemic Symptoms)

- Fever
- Rash
- Eosinophilia
- Hepatitis
- Lymphadenopathy

5️⃣ AGEP

(Acute Generalized Exanthematous Pustulosis)

- Sudden pustular eruption
- Fever
- Neutrophilia

B thalassemia minor counseling

🧬 1️⃣ Explain the Condition (Simple Language for Patient)

- It is a **genetic blood condition**
- Person is a **carrier**
- Usually no major health problems
- May have mild anemia
- Not the same as **thalassemia major**

Reassure:

👉 "You are healthy. This does not usually affect your lifespan."

⚠️ 3️⃣ Important Counseling Points

❗ Do NOT give iron unless iron deficiency is proven

Many patients are misdiagnosed as iron deficiency anemia.

👶 4️⃣ Marriage & Pregnancy Counseling (Most Important Part)

This is the key OSPE/viva focus.

If ONE partner is carrier:

- Child may be:
  - 50% carrier
  - 50% normal
- No thalassemia major

If BOTH partners are carriers:

- 25% → Thalassemia major
- 50% → Carrier
- 25% → Normal

Very important to screen spouse.

🧫 5️⃣ Screening Advice

- Recommend spouse screening (Hb electrophoresis
- If both carriers → refer for genetic counseling

🧬 6️⃣ Prenatal Diagnosis (If Both Carriers)

Options:

- Chorionic villus sampling (10–12 weeks)
- Amniocentesis (15–18 weeks)

To detect:

🔴 Beta thalassemia major

🏥 7️⃣ Lifestyle Advice

- Balanced diet
- Avoid unnecessary iron
- Inform doctors before treatment
- Family screening recommended

Child having climbing stairs difficulty, hypertrophy of calf and lordhosis, (DMD) mode of inheritance, tx?

Duchenne muscular dystrophy (DMD)
Mode of Inheritance - X-linked recessive
Mutation in dystrophin gene

💊 Treatment (No cure – supportive)

1️⃣ Corticosteroids (mainstay)

- Prednisolone
- Deflazacort

  → Slows progression

2️⃣ Physiotherapy

- Prevent contractures
- Maintain mobility

3️⃣ Cardiac care

- ACE inhibitors
- Regular echo monitoring

4️⃣ Respiratory support

- Monitor FVC
- Non-invasive ventilation later

5️⃣ Orthopedic management

- Braces
- Scoliosis management

6️⃣ Genetic counseling

Important for mother and family

📉 Prognosis

- Wheelchair by 10–12 years
- Cardiomyopathy & respiratory failure common causes of death
- Life expectancy improving with modern care

Erythroblastosis Fetalis (Hemolytic Disease of the Newborn- HDN)

Definition
A condition in which maternal antibodies destroy fetal red blood cells, leading to hemolytic anemia in the fetus/newborn.
Most commonly due to Rh incompatibility.

Cause (Most Important: Rh Incompatibility)

Occurs when:

- Mother is **Rh-negative**
- Baby is **Rh-positive**

During first pregnancy → mother becomes sensitized (forms anti-D antibodies).
In subsequent Rh-positive pregnancy → maternal IgG crosses placenta → destroys fetal RBCs.

Management

🔹 During Pregnancy

- Monitor antibody titers
- Middle cerebral artery Doppler (to detect fetal anemia)
- Intrauterine transfusion (if severe anemia)

🔹 After Birth

- Phototherapy (for jaundice)
- Exchange transfusion (severe cases)
- Blood transfusion (if anemia severe)

Prevention (Very Important)

👉 Give **Anti-D immunoglobulin** to Rh-negative mother:

- At 28 weeks gestation
- Within 72 hours after delivery of Rh-positive baby
- After miscarriage, abortion, ectopic pregnancy, trauma

This prevents maternal sensitization.

🔑 Quick Viva Points

- Most common cause → Rh incompatibility
- Direct Coombs positive in baby
- Severe form → Hydrops fetalis
- Prevention → Anti-D injection
- First pregnancy usually safe, second affected

Acanthosis Nigricans

Appearance: Thick, velvety dark patches, especially in skin folds (neck, armpits).

Common in: Type 2 diabetes or pre-diabetes
Obesity – especially in children and adolescents.

Causes: Insulin resistance, obesity, hormonal disorders.

Investigations

Depends on suspected cause:

If metabolic:

- Fasting blood sugar
- HbA1c
- Lipid profile
- Insulin levels

If malignancy suspected:

- Detailed history (weight loss, anorexia)
- Endoscopy (if gastric cancer suspected)
- Imaging (CT scan)

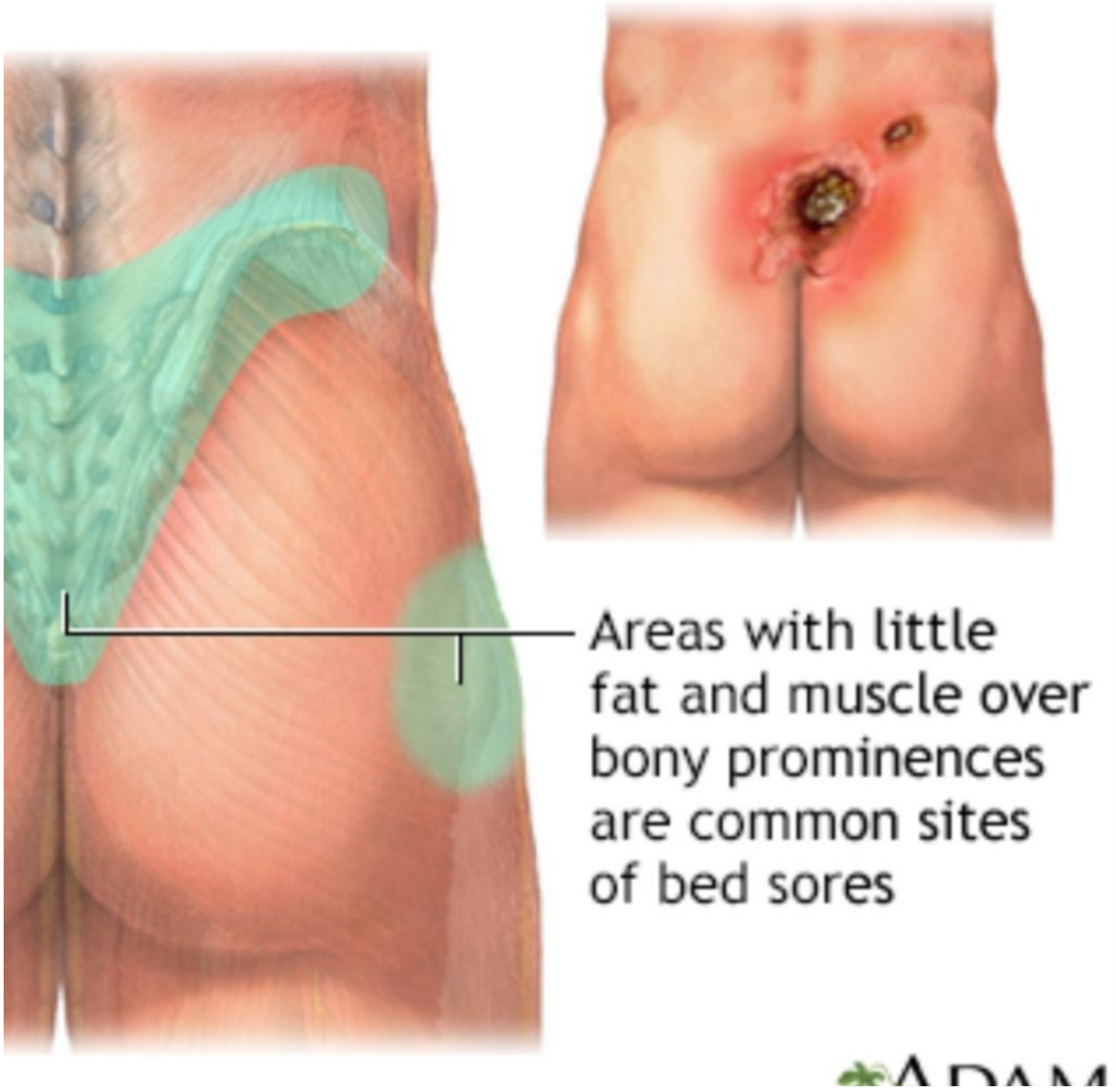
Management

🔹 1️⃣ Treat Underlying Cause (Most Important)

- Weight reduction
- Control diabetes
- Manage PCOS
- Treat malignancy

🔹 2️⃣ Topical Treatment (Cosmetic)

- Topical retinoids
- Salicylic acid
- Urea cream
- Laser therapy (rarely)



Bed sores

Identify

Management
Dressing debribement

Prevention
Air foam mattress
Prevents pressure points
Hygiene
2 hourly turn over

Bedsores (Pressure Ulcers / Decubitus Ulcers)

Definition

Localized injury to **skin and underlying tissue** due to prolonged **pressure**, usually over bony prominences.

Common in **bedridden, paralyzed, elderly, ICU patients**.

Common Sites

- Sacrum (most common)
- Heels
- Greater trochanter
- Ischial tuberosity
- Elbows
- Occiput (in children)

Bed Sores

Pathophysiology

Prolonged pressure → ↓ blood supply → ischemia → tissue necrosis.

Risk increases with:

- Immobility
- Malnutrition
- Diabetes
- Incontinence
- Old age

Staging of Pressure Ulcers (Very Important in Exam)

Stage	Description
Stage I	Non-blanching erythema, skin intact
Stage II	Partial thickness skin loss (blister/shallow ulcer)
Stage III	Full thickness skin loss, fat visible
Stage IV	Muscle/bone exposed
Unstageable	Base covered with slough/eschar

Clinical Features

- Redness over pressure area
- Pain
- Ulcer formation
- Foul discharge (if infected)

Complications

- Infection (cellulitis)
- Osteomyelitis
- Sepsis
- Fistula formation

nagement

🔹 1️⃣ Prevention (Most Important)**

- Reposition patient every **2 hours**
- Air mattress / water bed
- Keep skin dry
- Proper nutrition (high protein diet)
- Physiotherapy

🔹 2️⃣ Local Wound Care**

- Clean with saline
- Debridement (surgical/enzymatic) if necrotic tissue
- Appropriate dressing
- Negative pressure wound therapy (in some cases)

🔹 3️⃣ Antibiotics**

- Only if infected (not routinely)

🔹 4️⃣ Surgical Management**

- For Stage III & IV
- Flap reconstruction

🔑 Quick Viva Points

- Most common site → **Sacrum**
- Cause → Prolonged pressure → ischemia
- Most important management → **Prevention**
- Stage IV → Bone exposed

Station
Nerve examination
Radial median ulnar

Station
Dermatomyositis and its medication

Staion
Locomotor examination

Station
GPE

Station
Neonatal resuscitation

Station
Hereditary spherocytosis diagnoses counselling doing splenectomy

Station
Hand examination

Osteoporosis
Identify
Investigations (dexa scan)
How will u monitor
(dexa scan)
Treatment
Prevention

Haemophila scenario

Investigations
Treatment
Parents counseling
(in case bleed occurs cold compress

An **X-linked recessive bleeding disorder** due to deficiency of:

- **Factor VIII → Hemophilia A (most common)**
- **Factor IX → Hemophilia B (Christmas disease)**

Common in males.

1️⃣ Investigations

A. Screening Tests

Test	Result in Hemophilia
Platelet count	Normal
Bleeding time	Normal
PT (Prothrombin time)	Normal
aPTT	**Prolonged**
Thrombin time	Normal

👉 Key finding: **Isolated prolonged aPTT**

B. Confirmatory Test

- **Factor assay**
  - ↓ Factor VIII → Hemophilia A
  - ↓ Factor IX → Hemophilia B

C. Severity Classification (Based on Factor Level)

Factor Level	Severity
<1%	Severe
1–5%	Moderate
5–40%	Mild

D. Additional Tests

- Mixing study (corrects in hemophilia, does not correct if inhibitor present)
- Genetic testing (for f… screening)

2️⃣ Management

A. Acute Bleeding

🔹 **Replace deficient factor**

Type	Treatment
Hemophilia A	Factor VIII concentrate
Hemophilia B	Factor IX concentrate

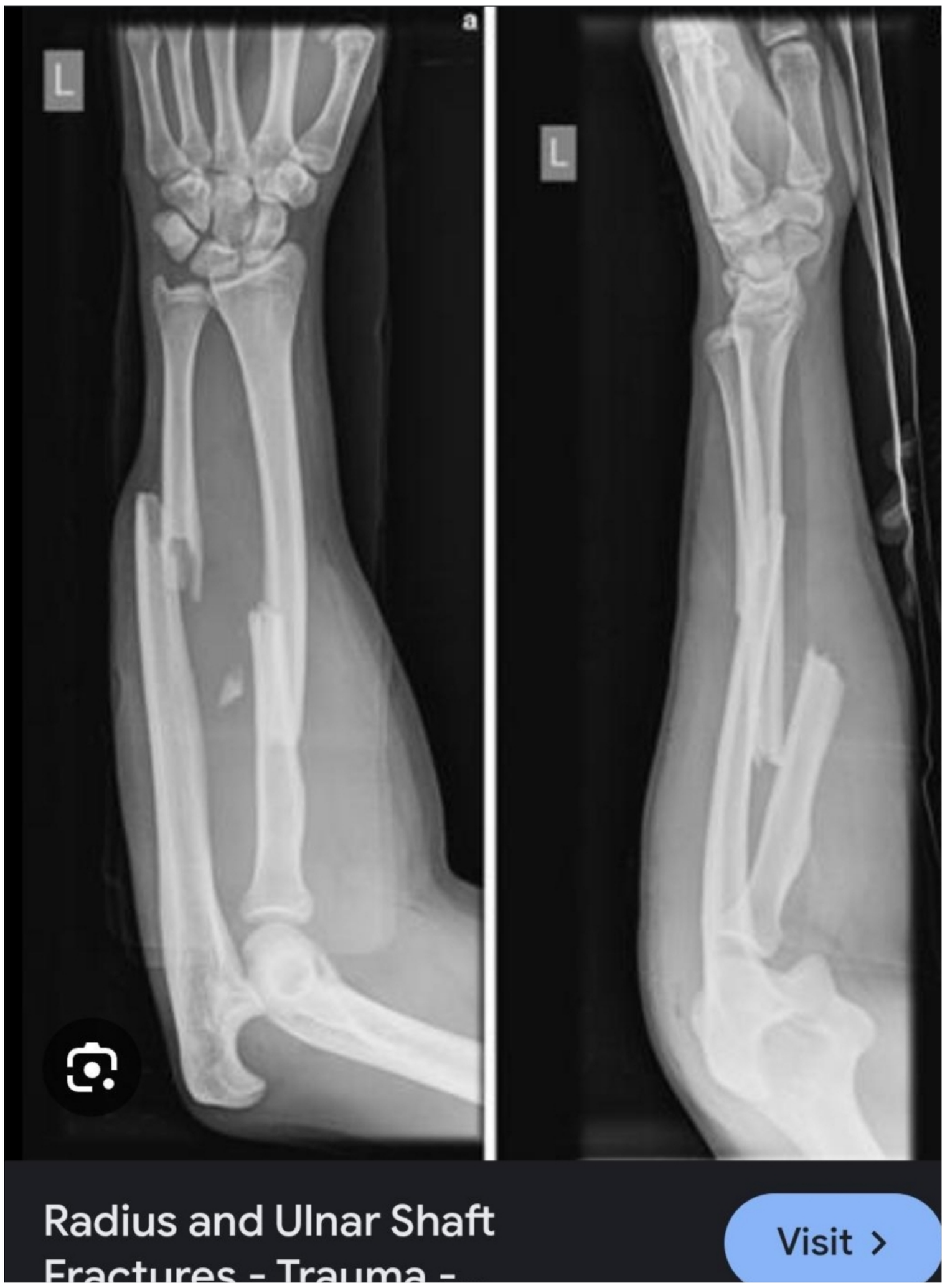
- Dose depends on severity and site of bleeding

B. Mild Hemophilia A

- **Desmopressin (DDAVP)** → increases factor VIII release

C. Adjunct Therapy

- Tranexamic acid (for mucosal bleeding)
- RICE (Rest, Ice, Compression, Elevation) for joint bleed
- Avoid IM injections


a
L
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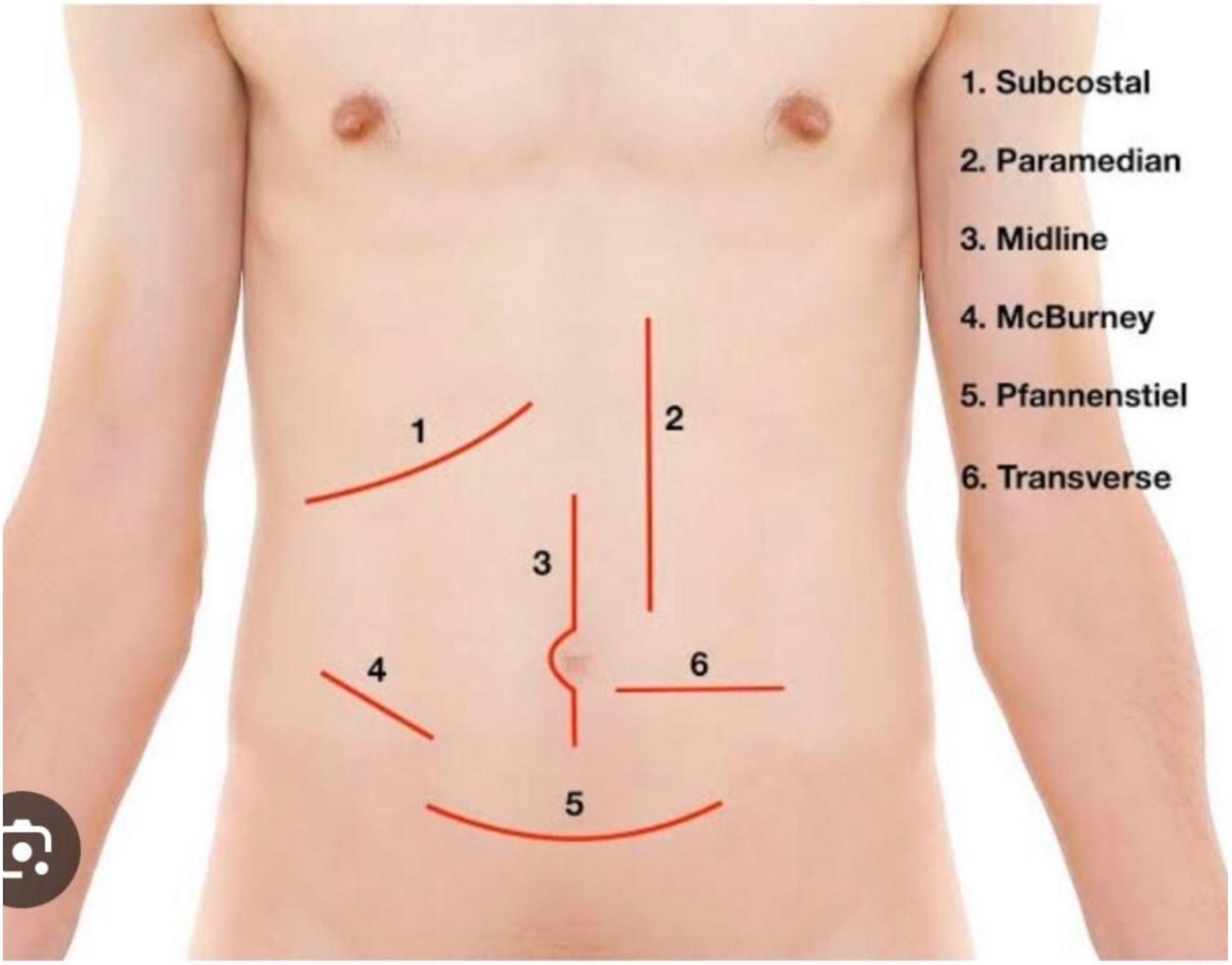
Radius and Ulnar Shaft
Fractures - Trauma -
Visit >



Name the incisions and write their uses/indications.

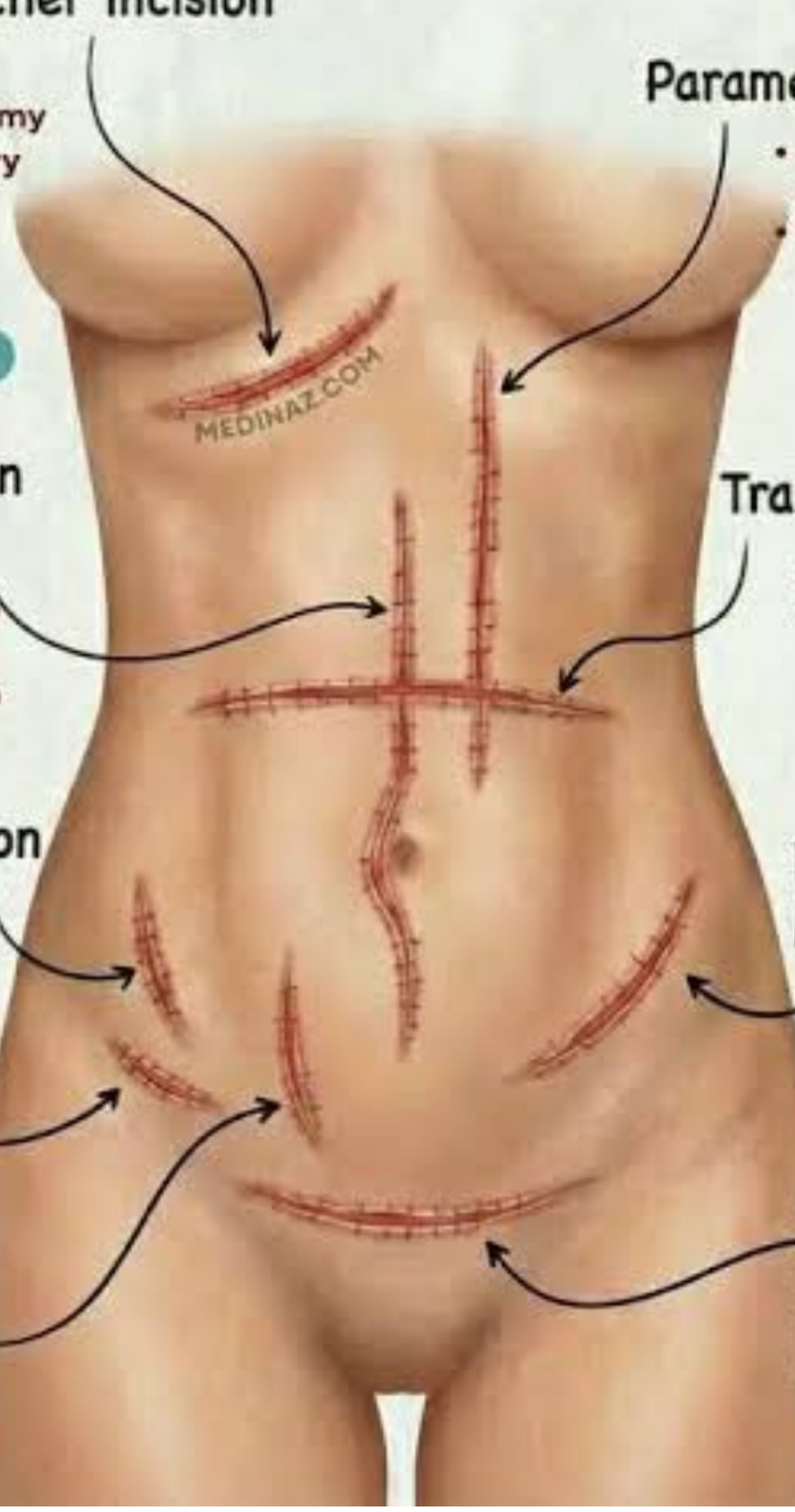
ABDOMINAL INCISIONS

Kocher incision

- Open cholecystectomy
- Liver and biliary surgery

Paramedian incision

- Elective upper abdominal surgeries
- Stomach, pancreas (older practice)



Midline incision

- Emergency laparotomy
- Exploratory surgery
- Bowel obstruction, perforation, trauma

Transverse incision

- Colonic surgery
- Pediatric abdominal surgery

McBurney incision

- Open appendectomy

Rutherford-Morrison incision

- Renal transplant
- Iliac vessel exposure

Lanz incision

- Appendectomy (especially cosmetic preference)

Battle incision

- Older technique for appendectomy or pelvic access

Pfannenstiel incision

- Cesarean section
- Gynecological surgeries (hysterectomy)

Investigations

< 4–6 Months

- **Ultrasound hip** (investigation of choice)

> 6 Months

- X-ray pelvis:
  - Shallow acetabulum
  - Displaced femoral head
  - Increased acetabular angle

Management

1. Birth to 6 Months

- **Pavlik harness** (keeps hips flexed and abducted)
  - Worn for 6–12 weeks

2. 6–18 Months

- Closed reduction + hip spica cast

3. >18 Months

- Open reduction ± osteotomy

Developmental Dysplasia of the Hip (DDH)

Definition:

Developmental dysplasia of the hip (DDH) is a spectrum of abnormalities where the femoral head and acetabulum are not properly aligned or developed, leading to hip instability, subluxation, or dislocation.

Complications

- Avascular necrosis of femoral head
- Residual dysplasia
- Early osteoarthritis
- Leg length discrepancy

Etiology / Risk Factors

- Female sex (more common in girls)
- First-born child
- Breech presentation
- Oligohydramnios
- Family history of DDH
- Associated conditions:
  - Congenital muscular torticollis
  - Metatarsus adductus

In Neonates (0–3 months)

1. **Ortolani test** (reduction test)
   - "Clunk" felt when dislocated hip is reduced.
2. **Barlow test** (dislocation test)
   - Hip can be dislocated posteriorly.
3. Asymmetrical thigh/gluteal folds

After 3–6 Months

- Limited hip abduction
- Limb length discrepancy
- Apparent shortening (Galeazzi sign)

After Walking Age

- Painless limp
- Trendelenburg gait
- Waddling gait (bilateral DDH)
- Lumbar lordosis (bilateral)

DEVELOPMENTAL DYSPLASIA OF HIP (DDH):

Developmental dysplasia of the hip (DDH) describes a variety of conditions in which the ball and socket of the hip do not develop properly.

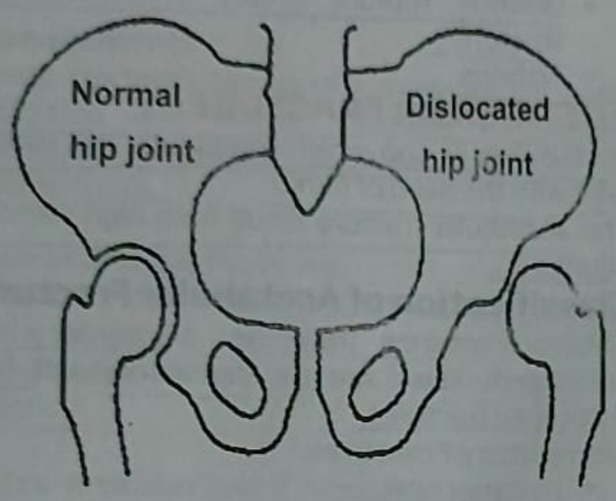


Fig: Showing left sided dislocated hip joint in which acetabulum is not fully developed:

The hip is a 'ball and socket' joint. Normally the head of the femur is round ball shape which fits into a cup like socket on the pelvis (acetabulum).In case of DDH the acetabulum may not be develop fully or it may be shallow which may result in displacement of the head of the femur (Dislocation) which may be reducible or irreducible (see figure below).The condition can be unilateral or bilateral. The incidence of congenital dislocated hip is about 2 per 1000 live births and is more common in girls than boys.

AETIOLOGY:

- Breech presentation
- Family history (risk is increased 30 times)
- spina bifida
- Racial factors

CLINICAL FEATURES:

- Extra high crease
- Limitation of abduction
- Pain after exercise
- Limp

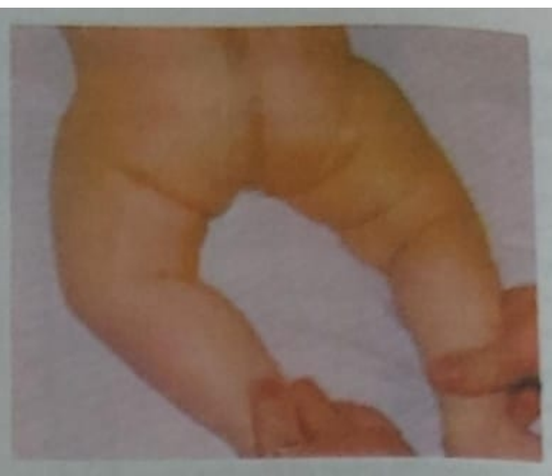


Fig: Showing extra thigh crease in case of DDH:

CLINICAL TESTS:

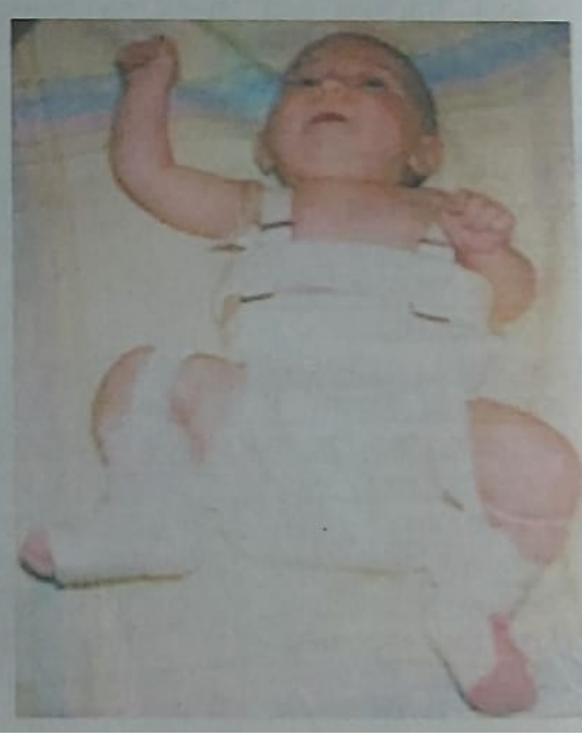
Ortolani Test:
If hip is abducted, it is reduced with typical clink.
Barlow Test:
If hips are adducted then dislocation occurs.

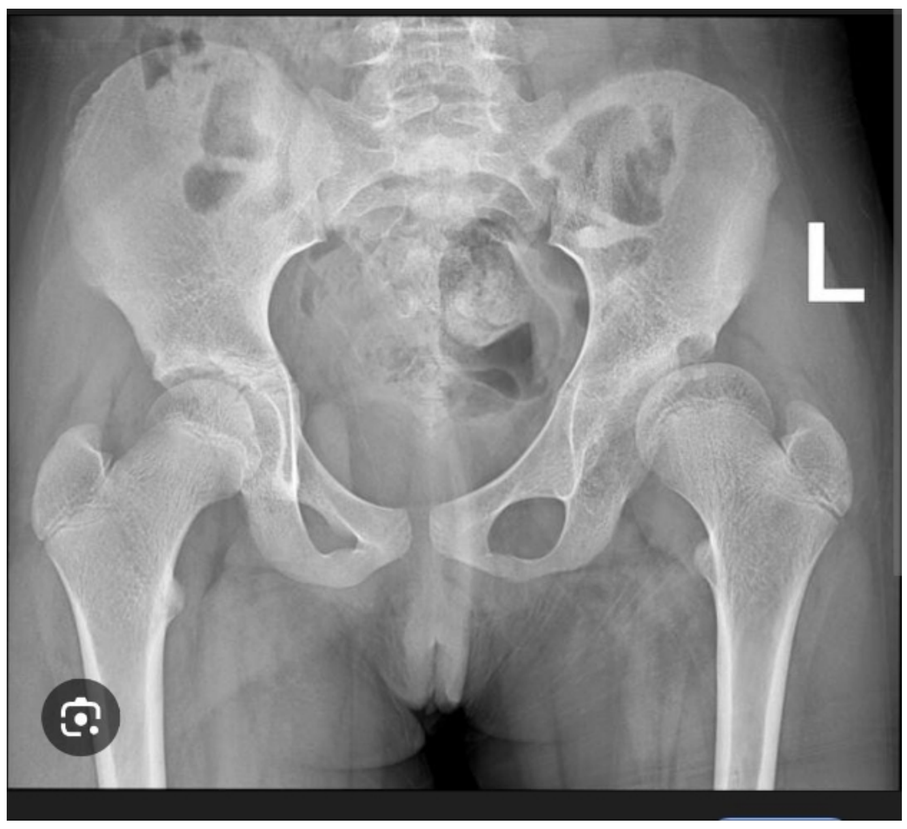
INVESTIGATION: Ultrasonography has high sensitivity to detect the disease Radiography is also helpful.

TREATMENT:

Treatment depends upon the age of the patient

Neonates:
HIP are flexed and abducted and this position is maintained by various splints as shown in diagram below.

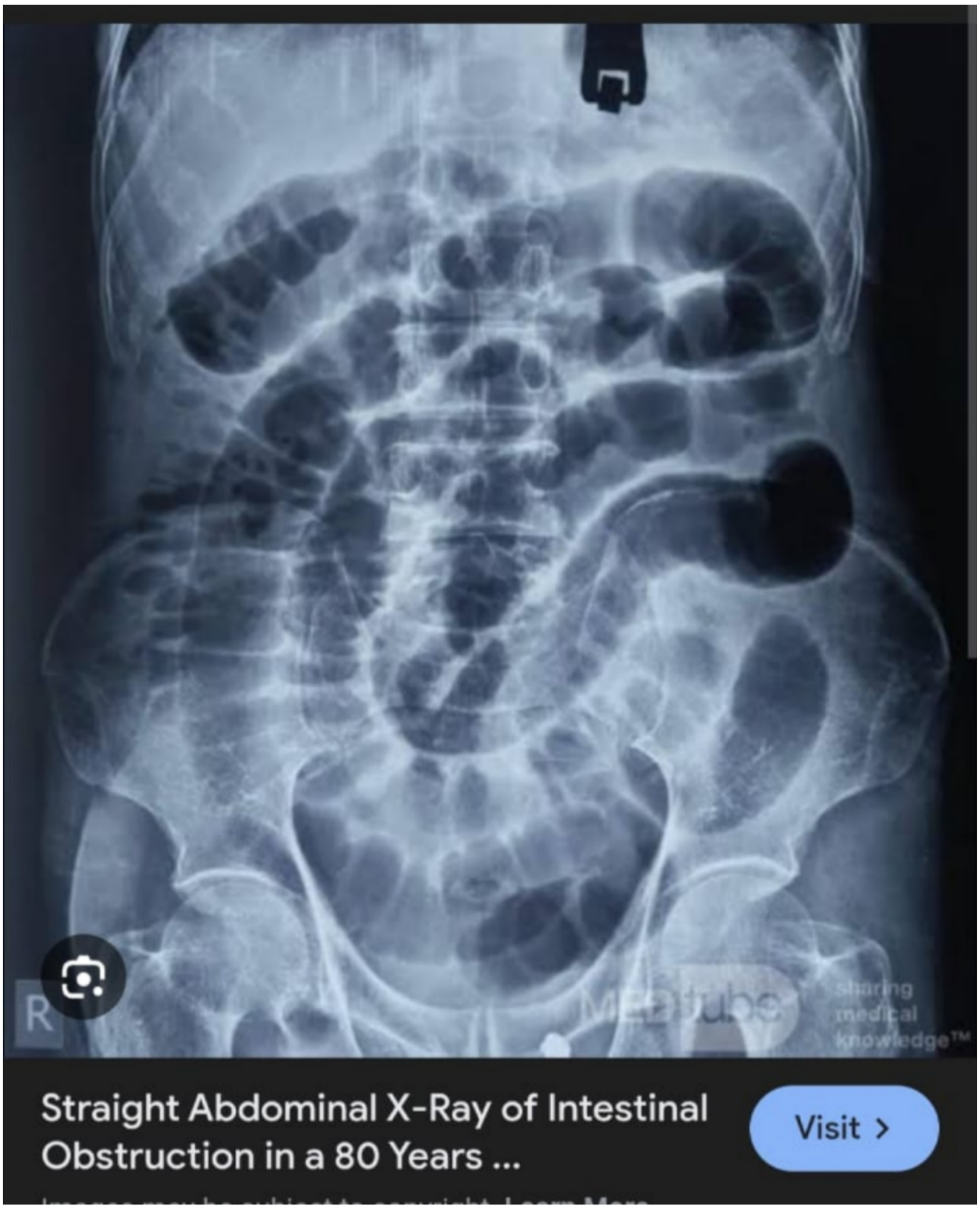




Infant:
Conservative treatment as mentioned in treatment of neonates is still effective but if failed than open reduction can be carried out at later stage.

Toddler and child:
Open reduction with bony realignment is necessary surgery for open reduction should be carried out after one year of age.

Older child:
After the age of 6 years surgery is usually unrewarding.


R
Meatube
sharing
medical
knowledge™
Straight Abdominal X-Ray of Intestinal Obstruction in a 80 Years ...
Visit >

📌(written) 1 day baby born with vaccum delivery parietal protrusion that doesnot cross suture lines but all normal in functions no pitting feeding normally cell count all normal hb 15 bilirubin not yet high enough phototherapy
What are differentials
WhAt are risk
What are complication

Differential Diagnosis
* Cephalhematoma
* Subgleal hemorrhage
* Caput succedaneum
* Skull fracture

Risk Factors
* Vacuum delivery
* Forceps delivery
* Prolonged 2nd stage of labor
* Large baby
* Coagulation disorders

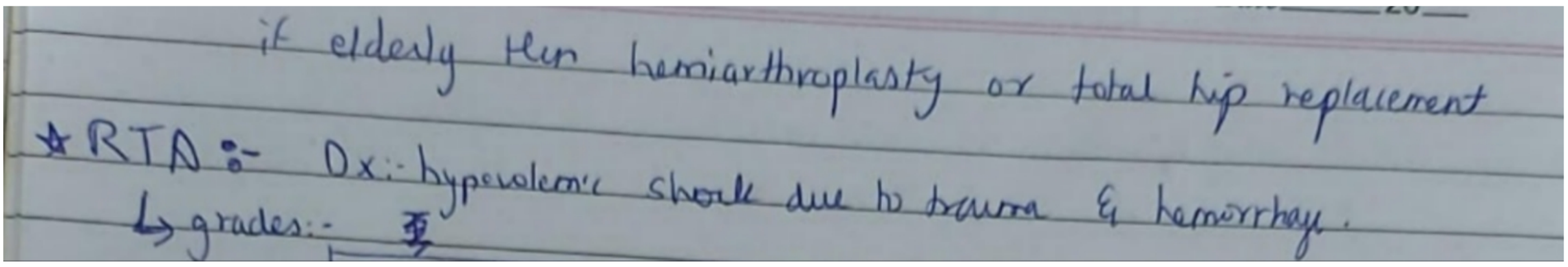
Complications
* Hyperbilirubinemia
* Anemia
* Calcification
* Infection

📌(Viva) person with history of RTA anxious bp low pulse high

Diagnosis

Grade of hypolvolemic shoch

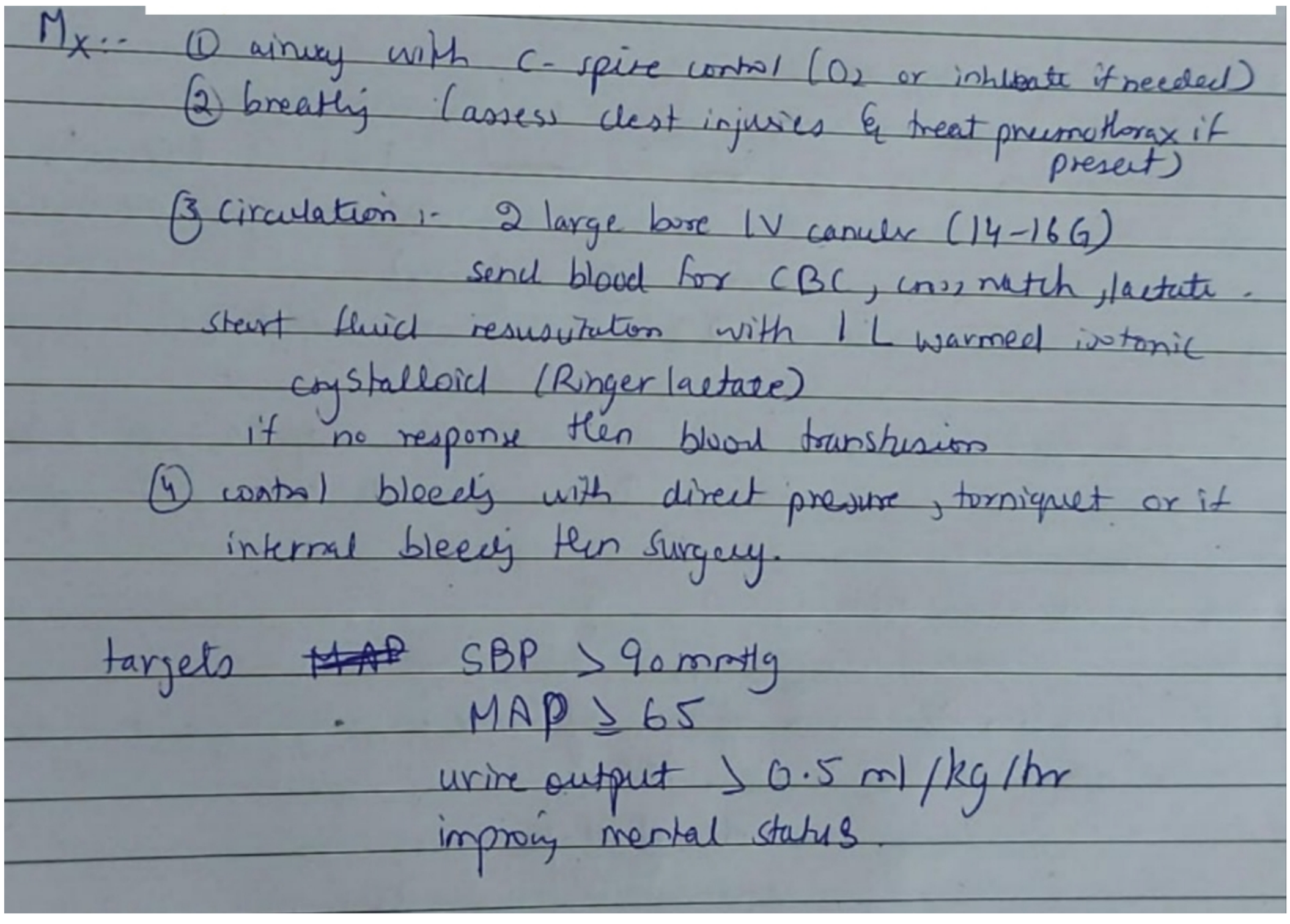
Management



2️⃣ Grade of Hypovolemic Shock

Based on **ATLS classification**

Class	Blood Loss	Pulse	BP	Mental Status
I	<15%	Normal	Normal	Slight anxiety
II	15–30%	>100	Normal	Anxious
III	30–40%	>120	↓ BP	Confused
IV	>40%	>140	Markedly ↓	Lethargic



📌(patient)Elbow examination
(elbow flexion extension degrees main kitni hoti hai)
(locate olecranon fossa)

📌(patient) Gpe of a woman (positive finding is redness on face (malar rash))

📌(patient) Rhematoid hand examination

Module N – MSK OSCE Station 04

Examination of Rheumatoid Hands

Time Allowed: 5 minutes

Maximum Marks: 6

1. Look - General Inspection (1 Mark)

- Observe for deformities (0.5 Mark):
  - Swan neck deformity, boutonniere deformity, Z-thumb, ulnar deviation.
- Skin changes (0.5 Mark):
  - Rheumatoid nodules, scars from surgeries, skin thinning, erythema.

2. Feel - Palpation (2 Marks)

- Joint swelling and tenderness (1 Mark):
  - Metacarpophalangeal, proximal interphalangeal, and wrist joints.
- Synovitis assessment (0.5 Mark):
  - Spongy feel of synovium or warmth.
- Tendon involvement (0.5 Mark):
  - Palpate for tendon rupture or tenosynovitis.

3. Move - Special Maneuvers (1 Mark)

- Assess deformities (0.5 Mark):
  - Check for fixed vs. correctable deformities.
- Screen for nerve involvement (0.5 Mark):
  - Tinel's or Phalen's test for carpal tunnel syndrome.

4. Assess - Functional Assessment (1 Mark)

- Assess grip strength, pincer grip, or ability to perform daily activities (1 Mark).

5. Communication and Summarization (1 Mark)

- Communicates findings concisely throughout the examination (0.5 Mark).
- Provides a structured summary of findings linking to RA (0.5 Mark).

Important Notes for Examiner:

- Ensure candidates follow infection control protocols.
- Look for a systematic and structured approach.
- Focus on the candidate's ability to correlate findings with the diagnosis of rheumatoid arthritis.

📌 (viva/interactive/ no patient) joint examination

And if patient has knee joint pain then wt would u be suspecting (d/ds)

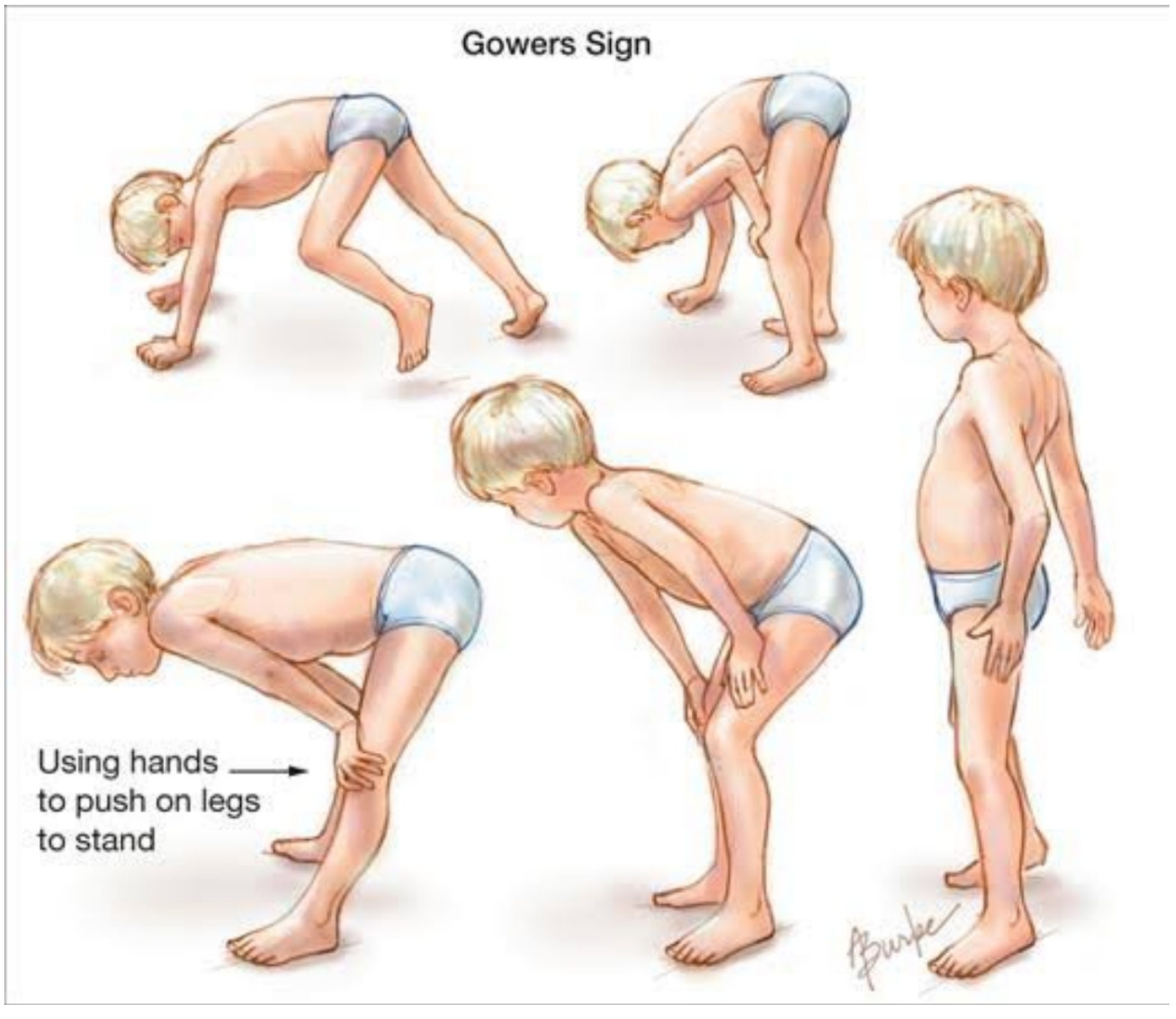
And dmd gower sign wt is it ?

---

* joint ex, if knee pain DJDs: L septic arthritis
L osteoarthritis
L reactive arthritis
L) gout LRA Lmeniscal tear (ACL/PCL)
L) ligament or fracture injury. LJIA

gower sign:- child uses hands & arms to walk up their own body from floor due to proximal muscle weakness

DMD is X-linked recessive disorder in which dystrophin gene mutation & weakness of muscles starts from pelvic girdle & progress to shoulder.



Molluscum Contagiosum

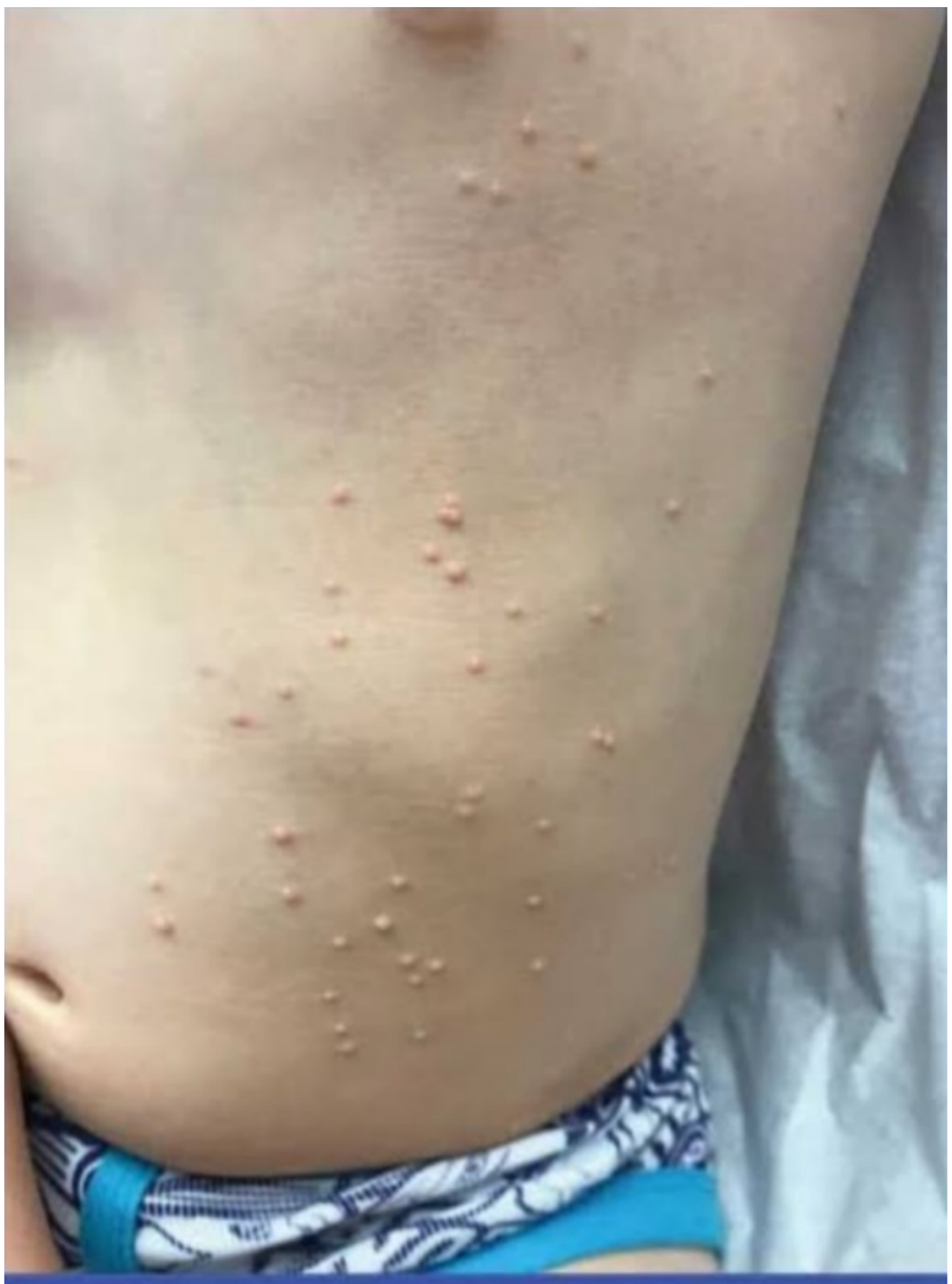


Figure 1. Typical presentation of multiple molluscum contagiosum papules: 2– 5mm, dome-shaped, pink- or skin-colored, discrete, shiny papules, pictured here on Caucasian skin. (Photograph courtesy of Adelaide Hebert, MD)

Management

✅ 1. Reassurance (Most Important)

- Self-limiting
- Resolves in 6–12 months (sometimes up to 2 years)

✅ 2. Active Treatment (If symptomatic, cosmetic concern, genital lesions)

- **Curettage**
- **Cryotherapy**
- Topical agents:
  - Potassium hydroxide
  - Tretinoin
  - Salicylic acid
  - Imiquimod (less commonly now)

✅ 3. Immunocompromised Patients

- Screen for HIV if extensive
- Treat underlying condition

- Spread by:
  - Direct skin-to-skin contact
  - Sexual contact (in adults)
  - Shared towels, swimming pools
  - Autoinoculation (scratching spreads lesions)

Splenectomy Counselling (Very Important for Viva)

When counselling patient/parents:

🔹 1️⃣ Explain Why Surgery is Needed

"Your child's spleen is destroying red blood cells too quickly. Removing it will reduce anemia and improve symptoms."

🔹 2️⃣ Benefits

- Improves hemoglobin
- Reduces jaundice
- Decreases transfusion need
- Improves growth

🔹 3️⃣ Risks

Most important: **Overwhelming Post-Splenectomy Infection (OPSI)**

Organisms:

- Streptococcus pneumoniae
- Haemophilus influenzae
- Neisseria meningitidis

Other risks:

- Bleeding
- Thrombosis

🔹 4️⃣ Vaccination (Very Important)

Give before surgery:

- Pneumococcal vaccine
- Meningococcal vaccine
- Hib vaccine
- Annual influenza vaccine

🔹 5️⃣ Lifelong Advice

- Seek urgent medical care for fever
- May need prophylactic antibiotics (especially in children)
- Medical alert card/bracelet

🔑 Quick Viva Points

- Inheritance: Autosomal dominant
- Smear: Spherocytes
- Coombs: Negative
- Definitive treatment: Splenectomy
- Biggest risk post-op: OPSI

Juvenile RA
Types
Treatment

Juvenile Rheumatoid Arthritis (JRA)

Now more correctly called **Juvenile idiopathic arthritis (JIA)**

Definition:** Chronic autoimmune inflammatory arthritis occurring in children <16 years, lasting >6 weeks, after excluding other causes.

🔹 TYPES (ILAR Classification)

1️⃣ Oligoarticular JIA (Most Common – ~50%)

- ⩽4 joints involved in first 6 months
- Large joints (knee most common)
- Usually ANA positive
- Risk of chronic anterior uveitis

👉 Subtypes:

- Persistent (remains ⩽4 joints)
- Extended (>4 joints after 6 months)

2️⃣ Polyarticular JIA

- ⩾5 joints in first 6 months
- Small joints of hands + symmetric involvement
- Can be:
  - RF positive (resembles adult RA)
  - RF negative

More aggressive disease.

3️⃣ Systemic JIA (Still's disease)

- High spiking fever (quotidian)
- Evanescent salmon-pink rash
- Lymphadenopathy
- Hepatosplenomegaly
- Serositis

Can develop **macrophage activation syndrome (life-threatening)**

4️⃣ Enthesitis-related JIA

- Inflammation at tendon insertion sites
- Sacroiliitis
- HLA-B27 positive
- Boys >8 years common

Related to spondyloarthropathies.

5️⃣ Psoriatic JIA

- Arthritis + psoriasis

  OR
- Dactylitis
- Nail pitting
- Family history of psoriasis

- **Treatment:**
  - Aspirin & NSAIDs
  - Steroids for refractory cases.

ITP
Treatment
Diagnosis

Immune Thrombocytopenic Purpura (ITP)

Now called **Immune thrombocytopenic purpura**

🩺 Diagnosis (2-min OSCE Quick Points)

- Isolated thrombocytopenia (<100,000/μL)
- Normal Hb & WBC
- Peripheral smear → ↓ platelets, large platelets
- No hepatosplenomegaly
- Normal coagulation profile (PT, aPTT normal)
- Bone marrow → ↑ megakaryocytes (if done)
- Diagnosis of exclusion

💊 Treatment (Quick Exam Points)

🔹 If mild (platelets >30,000 & no bleeding)

- Observation only

🔹 If symptomatic or platelets <30,000

- Oral steroids (Prednisolone 1 mg/kg/day)

🔹 Severe bleeding

- IVIG
- IV methylprednisolone
- Platelet transfusion (only if life-threatening bleed)

🔹 Chronic / Refractory

- Rituximab
- Thrombopoietin receptor agonists
- Splenectomy (last option)

Scenario .dx Wegner granulomatosis
Investigations:
Diagnostic test
Treatment

It is a necrotising granulomatous systemic vasculitis, commonly involving upper respiratory tract, pulmonary and renal vessels

II. Diagnosis & Management:

- **Diagnosis:**
  - Active Disease:
    - Leukocytosis, elevated ESR, CRP
    - Elevated serum **c – ANCA**.
  - CXR or CT chest = nodules, infiltrates, cavities.
  - Increased BUN and creatinine, proteinuria, hematuria, dysmorphic RBCs.
  - Biopsy (either lung , kidney, or sinus):
    - It is the most accurate test.
    - It shows necrotizing inflammation of arterioles, capillaries, and venules.

- **Treatment:**
  - Induction:
    - Cyclophosphamide + high-dose steroids – OR –
    - Rituximab + high-dose steroids
  - Maintenance:
    - Methotrexate or Azathioprine ≥ 2 years after cyclophosphamide induction
    - If rituximab is sued for induction, repeat it after 6 months of maintenance.

Hernia consent form
Counselling
Complications
Laparoscopy of hernia
Explain Complications Injury tở spermatic cord

1️⃣ Consent for Hernia Surgery (Key Components)

Procedure: Inguinal hernia repair (open or laparoscopic)

🔹 Explain Diagnosis

"You have a weakness in the abdominal wall through which intestine/fat is protruding."

🔹 Explain Procedure

- Open repair (mesh placement)

  OR
- Laparoscopic repair (keyhole surgery with mesh)

🔹 Benefits

- Relief of swelling & pain
- Prevents obstruction/strangulation

🔹 Risks & Complications (Must Mention)

General

- Bleeding
- Infection
- Anesthesia risks
- DVT

Specific

- Recurrence
- Chronic groin pain
- Seroma/hematoma
- Injury to bowel or bladder
- Injury to spermatic cord/testicular vessels
- Testicular atrophy (rare)

🔹 Alternatives

- Watchful waiting (if asymptomatic)

🔹 Post-op Course

- Same day discharge (usually)
- Avoid heavy lifting 4–6 weeks

2️⃣ Counselling (Patient-Friendly)

- Surgery is definitive treatment.
- Mesh will strengthen the weak area.
- Recovery in 1–2 weeks (light activity).
- Report immediately if:
  - Fever
  - Severe pain
  - Scrotal swelling
  - Redness or discharge

3️⃣ Complications of Inguinal Hernia Repair

Early

- Bleeding
- Hematoma
- Wound infection
- Urinary retention

Late

- Recurrence
- Chronic groin pain (nerve injury)
- Testicular atrophy
- Mesh infection

4️⃣ Laparoscopic Hernia Repair

Two types:

- **TAPP** – Transabdominal preperitoneal repair
- **TEP** – Totally extraperitoneal repair

Advantages

- Less pain
- Faster recovery
- Bilateral repair possible
- Better cosmetic result

Disadvantages

- General anesthesia required
- Higher cost
- Risk of visceral injury

5️⃣ Explain: Injury to Spermatic Cord (V Viva)

The **spermatic cord** contains:

- Vas deferens
- Testicular artery
- Pampiniform plexus
- Nerves

How injury occurs?

- During sac dissection
- Mesh placement
- Excessive cautery

What can happen?

1️⃣ Vas deferens injury

- May cause infertility (especially bilateral)

2️⃣ Testicular artery injury

- Reduced blood supply → testicular atrophy

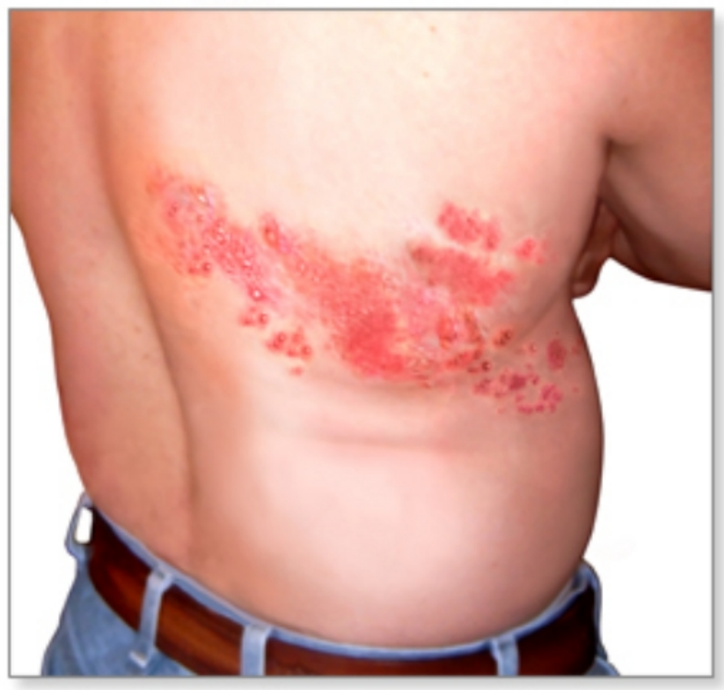
3️⃣ Venous injury

- Hematoma
- Varicocele

4️⃣ Nerve injury

- Chronic groin pain

[Shingles pic
Virus causing it
Other diseases caused by this virus



Shingles

ADAM.

📌 Diagnosis

Shingles (Herpes zoster)

Reactivation of latent virus in dorsal root ganglion → painful vesicular rash in dermatomal distribution.

🦠 Virus Causing It

Caused by **Varicella zoster virus (VZV)**

Also called **Human herpesvirus-3 (HHV-3)**.

📚 Other Diseases Caused by Same Virus

1️⃣ Chickenpox (Varicella)

- Primary infection
- Diffuse vesicular rash in children

2️⃣ Post-herpetic neuralgia

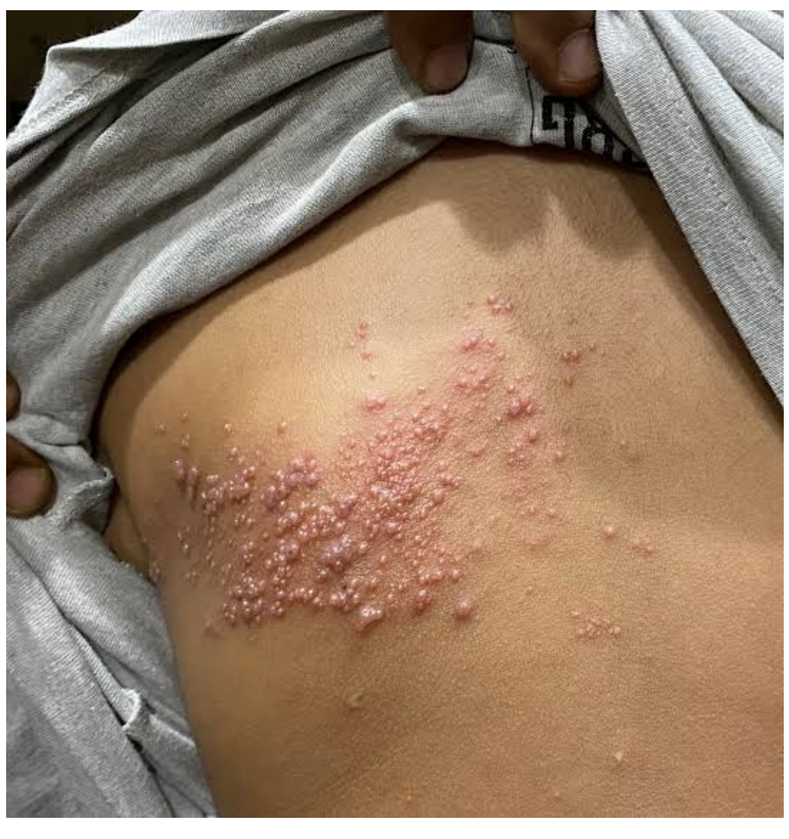
- Chronic neuropathic pain after shingles

3️⃣ Herpes zoster ophthalmicus

- Eye involvement (trigeminal nerve V1)

4️⃣ Congenital varicella syndrome

- If infection during pregnancy



Leprosy
] Types
Treatment
Leprosy types and which nerves r involve in leprosy

Leprosy

Caused by **Mycobacterium leprae**

🔷 Types of Leprosy (Ridley–Jopling Spectrum)

1️⃣ Tuberculoid (TT)

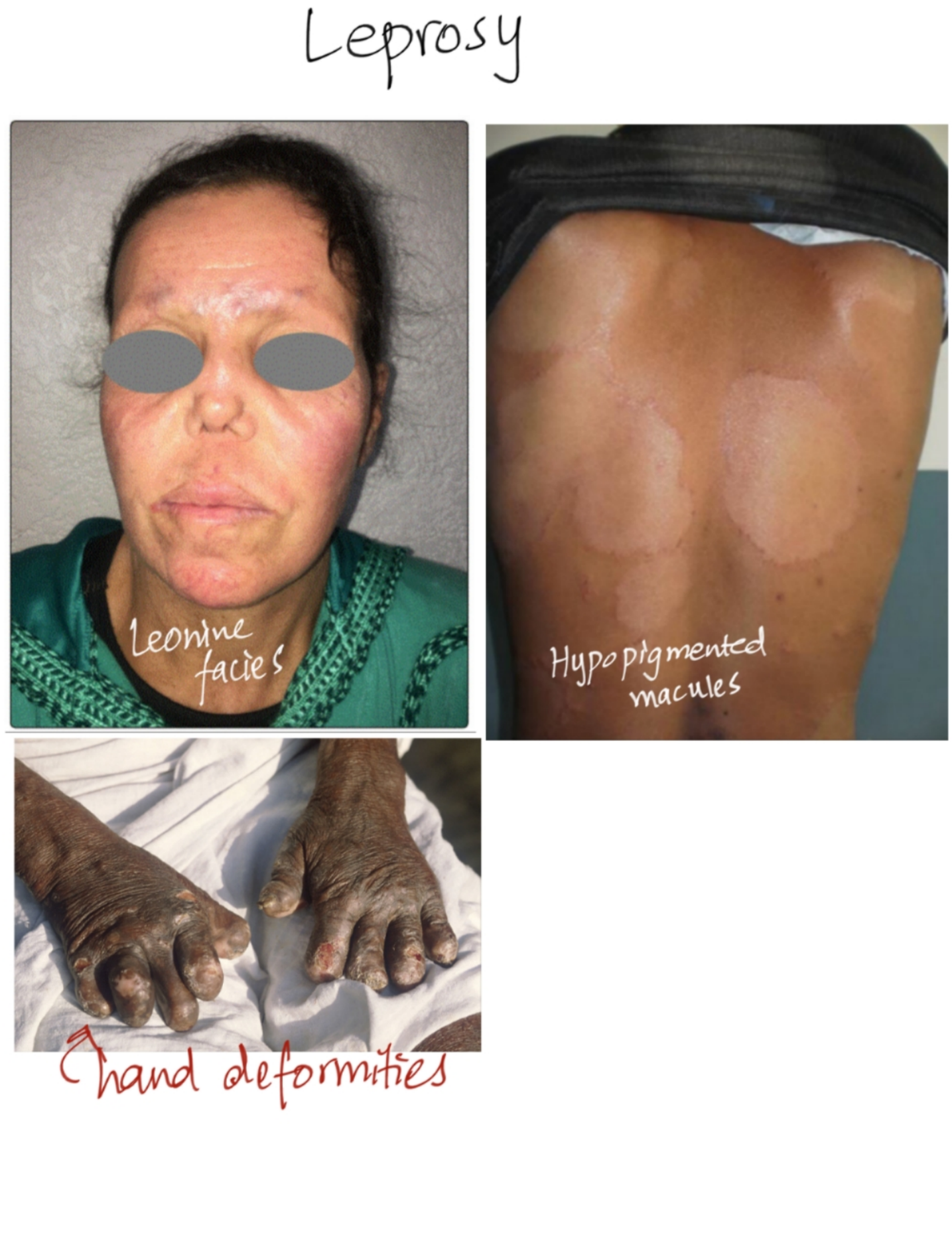
- Few hypopigmented patches
- Well-defined margins
- Severe nerve involvement
- Strong immunity
- Smear negative

2️⃣ Borderline (BT, BB, BL)

- Features between TT & LL
- Unstable type

3️⃣ Lepromatous (LL)

- Multiple lesions
- Symmetrical distribution
- Weak immunity
- Smear positive
- Systemic involvement



🔹 Nerves Commonly Involved in Leprosy

(Exam very important 🔥)

- Ulnar nerve → most common
- Common peroneal nerve
- Posterior tibial nerve
- Great auricular nerve
- Facial nerve (lagophthalmos)
- Radial cutaneous nerve

👉 Thickened, tender nerves are classic finding.

🔹 Clinical Features

- Hypopigmented or reddish patches
- Loss of sensation (touch, pain, temperature)
- Nerve thickening
- Claw hand (ulnar palsy)
- Foot drop (peroneal palsy)
- Leonine facies (LL type)

🔹 Treatment (WHO MDT – Multi Drug Therapy)

1️⃣ Paucibacillary (PB) – 6 Months

- Rifampicin (monthly supervised)
- Dapsone (daily)

2️⃣ Multibacillary (MB) – 12 Months

- Rifampicin (monthly)
- Dapsone (daily)
- Clofazimine (monthly + daily)

🔹 Leprosy Reactions (Viva Favorite)

1️⃣ Type 1 (Reversal reaction) → Steroids

2️⃣ Type 2 (Erythema nodosum leprosum) → Thalidomide or steroids

Posterior hip joint disclocation
Management
Within 6hrw reduction
And if left then necrosis

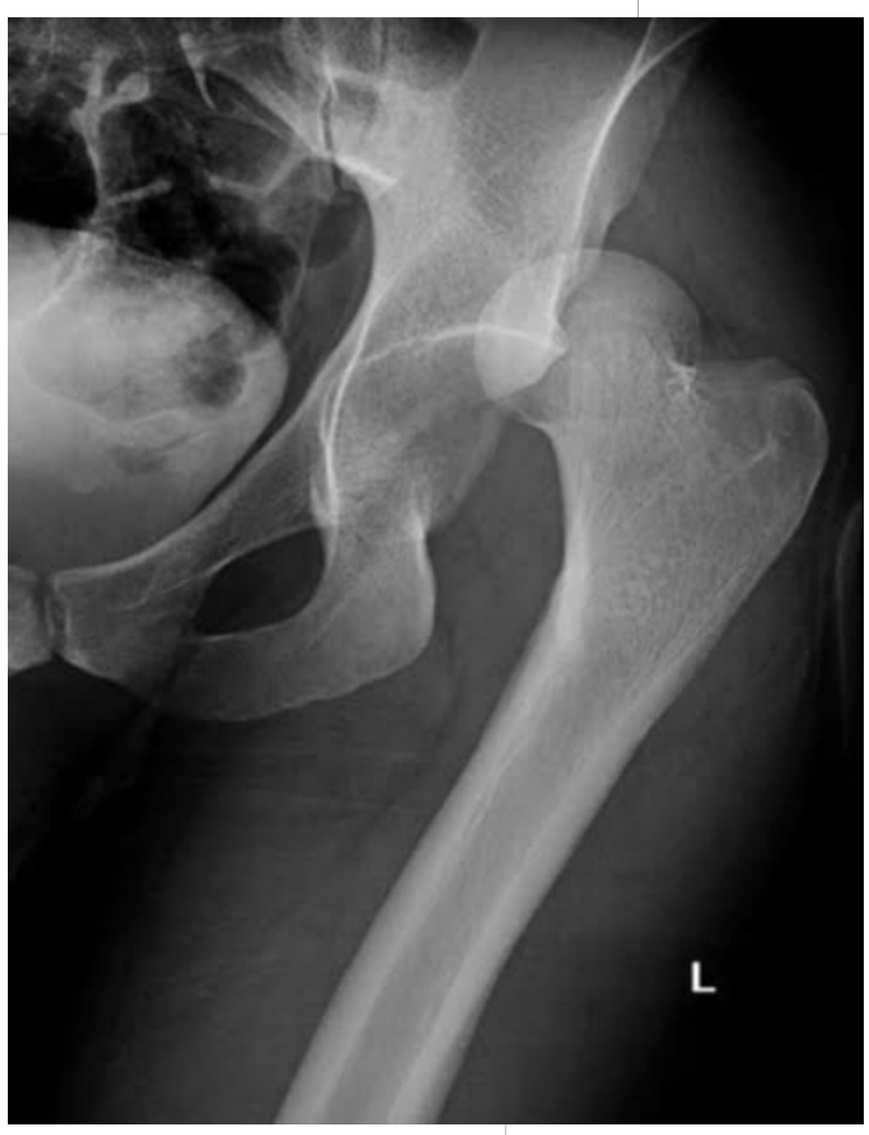
🦴 Posterior Hip Dislocation – Quick OSCE Guide

Definition:

Posterior displacement of the femoral head from the acetabulum, most commonly due to **high-energy trauma** (RTA, fall from height).

🔹 Clinical Features

- Leg **shortened, adducted, internally rotated**
- Severe pain, unable to move hip
- Possible sciatic nerve injury (foot drop, sensory loss)



🔹 Management

1️⃣ Emergency Assessment

- ABC (Airway, Breathing, Circulation)
- Rule out associated injuries (pelvic fractures, head injury)

2️⃣ Imaging

- X-ray pelvis: confirms posterior dislocation
- CT scan: if fracture suspected

3️⃣ Reduction

Goal: Reduce **within 6 hours** to prevent avascular necrosis (AVN)

Closed Reduction

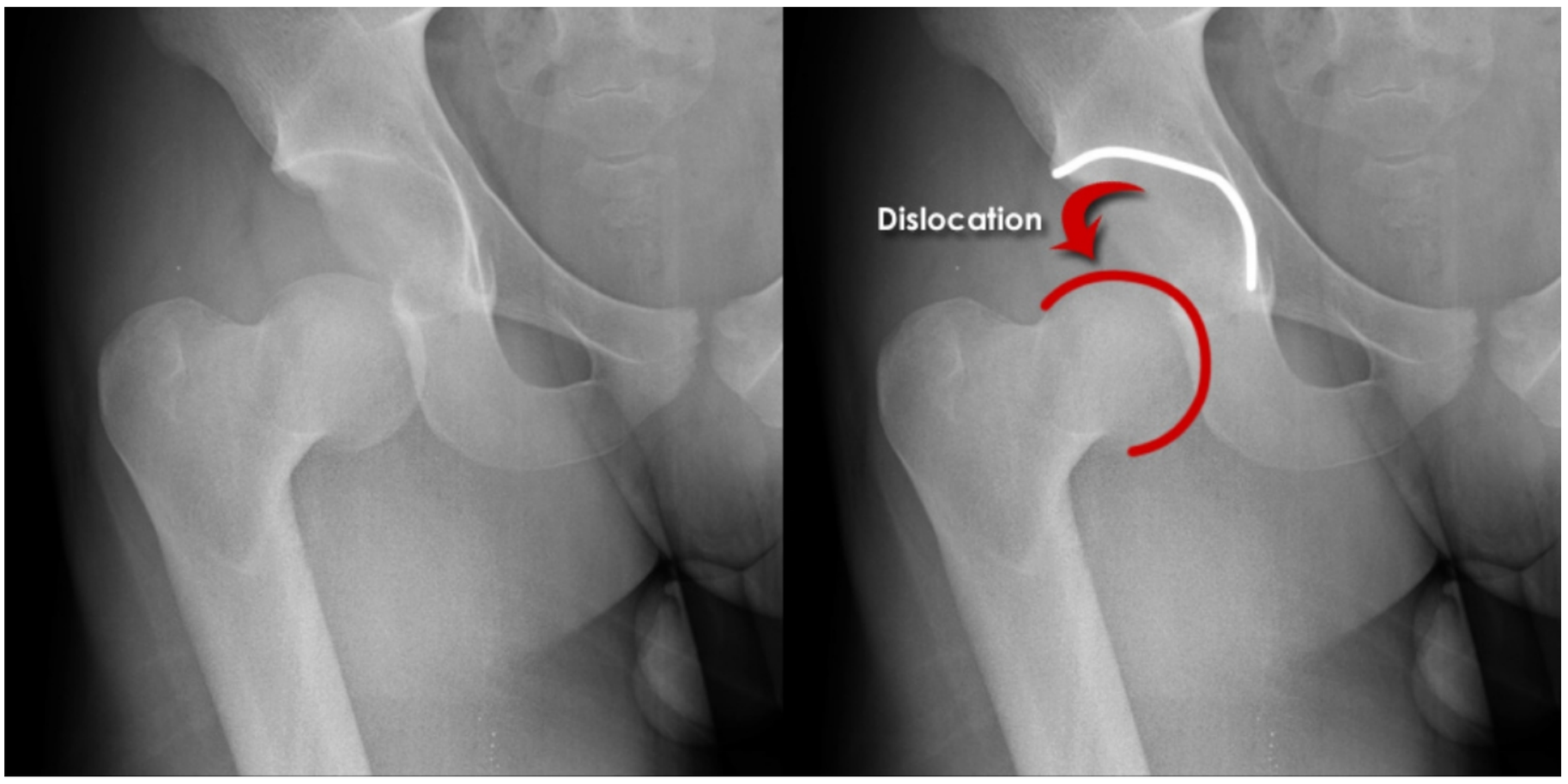
- **Allis maneuver:** Patient supine, hip flexed to 90°, gentle traction with assistant stabilizing pelvis
- Other maneuvers: Stimson, Captain Morgan

Post-reduction Care

- Confirm reduction on X-ray
- Neurovascular check (sciatic nerve)
- Bed rest for few days, then gradual mobilization
- Avoid weight-bearing for ~6 weeks if fracture present

4️⃣ Open Reduction

- Indicated if:
  - Irreducible dislocation
  - Associated acetabular fracture
  - Soft tissue interposition



🔹 Complications if Delayed (>6 hours)

1️⃣ **Avascular necrosis of femoral head** (most feared)

2️⃣ Post-traumatic osteoarthritis

3️⃣ Sciatic nerve injury

4️⃣ Recurrent dislocation

5️⃣ Heterotopic ossification

3 days ka baby tha who wasn't taking feed and was lethargic
Take relevant history from mother

1️⃣ Birth History (Antenatal + Perinatal)

- **Gestational age** – term or preterm?
- **Birth weight** – low birth weight?
- **Mode of delivery** – vaginal / C-section
- **Complications during labor** – prolonged labor, fetal distress, meconium-stained liquor
- **APGAR scores** – at 1 and 5 minutes
- **Resuscitation required** – oxygen, bag-mask ventilation, intubation?

2️⃣ Maternal History

- **Maternal illnesses** – diabetes, hypertension, infections (UTI, TORCH, HIV, hepatitis B)
- **Medications during pregnancy** – antibiotics, anti-epileptics, steroids
- **Infections / fever** during labor
- **Blood group & Rh status** – risk of hemolytic disease

3️⃣ Feeding & Vomiting

- Has the baby fed since birth?
- Frequency, duration, type (breast/bottle)
- Any vomiting, regurgitation, or bilious vomiting?
- Any difficulty latching or sucking?

4️⃣ Urine / Stool

- Number of wet diapers
- Stool color – meconium passed? Any diarrhea?

5️⃣ Symptoms

- Lethargy / decreased activity
- Temperature – fever or hypothermia
- Cyanosis, respiratory difficulty
- Seizures, tremors

6️⃣ Family / Social History

- Previous siblings with neonatal illness or death
- Consanguinity
- Any hereditary disorders

7️⃣ Important Red Flags to Ask

- Signs of **sepsis**: fever, lethargy, poor feeding
- Signs of **hypoglycemia**: jitteriness, lethargy, seizures
- Signs of **hypocalcemia**: jitteriness, spasms
- Signs of **congenital heart disease**: cyanosis, poor feeding

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robotic+ laproscopic advantages, disadvantage, indications etc

1️⃣ Laparoscopic Surgery

Definition: Surgery done through small abdominal incisions using a camera (laparoscope) and instruments.

🔹 Advantages

- Smaller incisions → better cosmesis
- Less postoperative pain
- Shorter hospital stay & faster recovery
- Less wound infection
- Earlier return to daily activities

🔹 Disadvantages

- Requires general anesthesia
- Limited tactile feedback
- Long learning curve
- Equipment cost & maintenance
- Risk of injury to vessels/viscera due to limited view

🔹 Indications

- Cholecystectomy
- Appendectomy
- Hernia repair
- Bariatric surgery
- Colon resections

2️⃣ Robotic Surgery

Definition: Surgery performed using a robotic system controlled by the surgeon, providing 3D vision and articulating instruments.

🔹 Advantages

- 3D magnified vision
- Greater dexterity & precision (wristed instruments)
- Tremor filtering
- Better for confined spaces (pelvis)
- Shorter learning curve for complex procedures

🔹 Disadvantages

- Very expensive equipment
- Longer setup & operative time initially
- Limited tactile feedback (no direct sensation)
- Requires trained personnel

🔹 Indications

- Prostatectomy
- Gynecologic surgeries (hysterectomy, myomectomy)
- Colorectal surgeries
- Complex urological or cardiac surgeries
- Pediatric procedures in small spaces

CML Counseling

1️⃣ Introduction / Explaining Diagnosis

- “You have a type of blood cancer called **Chronic Myeloid Leukemia (CML)**.”
- “It is caused by a change in the bone marrow cells, leading to increased white blood cells.”
- “It usually progresses slowly and can often be controlled with medication.”

2️⃣ Cause / Pathophysiology (Simplified for patient)

- “It occurs due to a genetic change called **Philadelphia chromosome**.”
- “This causes abnormal growth of white blood cells.”
- “It is **not contagious** and not caused by anything you did.”

3️⃣ Symptoms to Expect

- Fatigue / weakness
- Weight loss
- Night sweats
- Pain or fullness in the left abdomen (due to enlarged spleen)
- Easy bruising or bleeding

4️⃣ Treatment Options

1. **Targeted therapy** – e.g., **Imatinib / Dasatinib / Nilotinib**
   - Taken daily as tablets
   - Highly effective, controls disease
2. **Monitoring** – regular blood tests to check response
3. **Other options** (if resistant or advanced stage)
   - Stem cell transplant
   - Chemotherapy

7️⃣ Emotional Support

- Reassure patient and family
- Encourage joining support groups
- Address anxiety about chronic disease

5️⃣ Prognosis

- Most patients respond well to treatment
- Can live a normal life with regular follow-up
- Early diagnosis and adherence to medicine is crucial

8️⃣ Complications to Warn About

- Side effects of medication: nausea, rash, fatigue, fluid retention
- Disease progression if medication is stopped
- Rarely, transformation to acute leukemia (blast crisis)

6️⃣ Lifestyle & Follow-Up

- Regular blood tests every 3–6 months
- Healthy diet & regular exercise
- Avoid smoking / excessive alcohol
- Report any unusual bleeding, infections, or fever immediately

CLL COUNSELING

🩺 Chronic Lymphocytic Leukemia (CLL) – Counseling Guide (OSCE / Patient-Friendly)

1️⃣ Introduction / Explaining Diagnosis

- "You have a type of **blood cancer called Chronic Lymphocytic Leukemia (CLL)**."
- "It affects certain white blood cells called **lymphocytes**, which help your immune system."
- "These cells grow slowly and build up in your blood, bone marrow, and sometimes lymph nodes."
- "It is **not contagious**."

2️⃣ Cause / Pathophysiology (Simplified)

- "CLL occurs due to a change in the DNA of lymphocytes, causing them to live longer and accumulate."
- "This is usually a **slow-progressing disease** and often diagnosed incidentally."
- "Family history may slightly increase risk, but it is mostly sporadic."

3️⃣ Symptoms to Expect

- Fatigue, weakness
- Swollen lymph nodes (neck, armpits, groin)
- Fever, night sweats, weight loss
- Easy bruising or bleeding
- Recurrent infections

> Some patients may have **no symptoms** initially.

4️⃣ Treatment Options

Depends on stage and symptoms.

1. **Watchful waiting ("Active surveillance")**
   - For early-stage CLL without symptoms
   - Regular blood tests and check-ups
2. **Medications (when symptomatic or progressive)**
   - Targeted therapy: **Ibrutinib, Venetoclax**
   - Chemotherapy (less common now)
   - Monoclonal antibodies: **Rituximab**
3. **Advanced / refractory cases**
   - Stem cell transplant (rare, in selected patients)

5️⃣ Prognosis

- Early-stage CLL can be **slow and stable for years**
- Treatment is very effective when needed
- Regular monitoring is important

6️⃣ Lifestyle & Follow-Up

- Regular blood tests and doctor visits
- Avoid infections (good hygiene, vaccinations)
- Healthy diet, exercise, avoid smoking
- Report fever, bleeding, or sudden fatigue immediately

7️⃣ Emotional Support

- Reassure patient: not immediately life-threatening
- Provide counseling about chronic disease management
- Encourage joining support groups

8️⃣ Complications to Warn About

- Increased risk of **infections** due to abnormal lymphocytes
- Side effects of therapy (fatigue, nausea, bleeding)
- Rarely, transformation to **aggressive lymphoma (Richter's transformation)**

Periungual Vasculitis

Periungual = around the nail
Vasculitis = inflammation of blood vessels

👉 So, periungual vasculitis means inflammation of the small blood vessels around the nail folds.

—

What does it look like?

- Redness around nail folds
- Swelling
- Tenderness
- Small infarcts or ulcerations
- Splinter hemorrhages
- Ragged cuticles

—

Common Associations

It is usually seen in connective tissue diseases, especially:

- Systemic lupus erythematosus
- Dermatomyositis
- Systemic sclerosis
- Vasculitic disorders

Flaky paint dermatitis in kawashiorkor and zinc deficiency

Most likely diagnosis: Guillain-Barré syndrome

———

Reasoning from the scenario

- Previously healthy child
- Acute onset difficulty walking
- Tingling in feet (paresthesia)
- Down-going plantar reflexes → suggests lower motor neuron (LMN) involvement
- Sensation intact on exam (common in GBS; patients feel tingling but objective sensory loss may be minimal)

These features are classic for Guillain-Barré syndrome, an acute demyelinating polyneuropathy.

———

Typical clinical picture of GBS

- Ascending symmetrical weakness
- Paresthesias (tingling)
- Reduced or absent reflexes
- LMN signs (flaccid paralysis, down-going plantars)
- Often follows a recent infection

Outcome of Guillain-Barré syndrome

The prognosis is generally good, especially in children.

———

Typical course

1. Progression phase
   - Weakness worsens over 1–2 weeks.
   - May involve arms, face, and breathing muscles.
2. Plateau phase
   - Symptoms stabilize for days to weeks.
3. Recovery phase
   - Gradual improvement over weeks to months.
   - Most recovery occurs within 3–6 months.

Basal Cell Carcinoma (BCC) in Xeroderma Pigmentosum (XP)

Key Points

- Xeroderma pigmentosum is a rare autosomal recessive disorder caused by defective nucleotide excision repair.
- Patients have extreme sensitivity to UV light → DNA damage accumulates → early onset skin cancers.
- Basal Cell Carcinoma (BCC) is the most common skin cancer in XP children, often developing in sun-exposed areas (face, nose, eyelids).

Features of BCC in XP

- Pearly nodules, sometimes with ulceration ("rodent ulcer")
- Slow-growing but locally invasive
- Can appear very early (childhood or teenage years, unlike sporadic BCC in adults)

Other Skin Cancers in XP

- Squamous Cell Carcinoma (SCC) – aggressive, early onset
- Melanoma – less common but can occur

Management

1. Strict sun protection
   - Clothing, hats, sunscreen
2. Early surgical excision of lesions
3. Regular dermatology follow-up (frequent skin checks)
4. Adjunctive therapies in some cases:
   - Topical 5-fluorouracil
   - Retinoids for chemoprevention

"The most serious complication of Henoch-Schönlein purpura is renal involvement (HSP nephritis), which can rarely progress to chronic kidney disease."

1️⃣ General / Supportive Care

- Most cases are self-limiting (especially mild cases in children).
- Rest and avoidance of strenuous activity.
- Pain control:
- Acetaminophen for mild pain
- NSAIDs for arthritis/arthralgia (if renal function is normal)

2️⃣ Skin

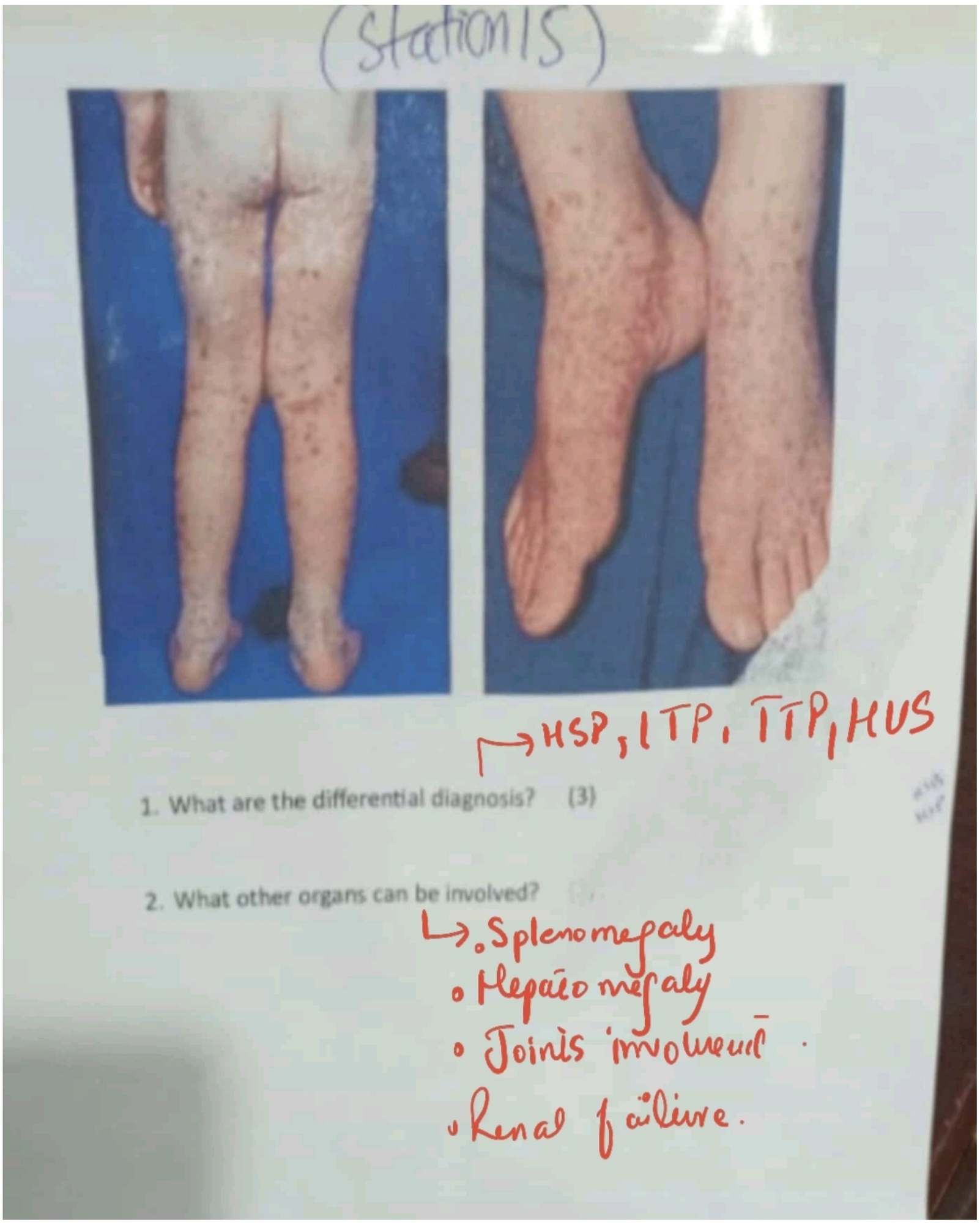
- Usually no specific treatment for purpura.
- Topical emollients if lesions are itchy.
- Monitor for necrosis or ulceration (rare).

3️⃣ Gastrointestinal

- Mild abdominal pain: supportive care, hydration, diet.
- Severe abdominal pain, GI bleeding, or intussusception:
- Hospital admission
- Consider corticosteroids (prednisolone) in severe cases.

4️⃣ Renal (Most Important)

- Monitor urine: hematuria, proteinuria
- Monitor blood pressure
- If significant nephritis:
- Oral corticosteroids
- Immunosuppressants (cyclophosphamide, azathioprine) for severe or progressive disease



Investigations

Complete Blood Count (CBC)
Peripheral Blood Smear
Coagulation Profile
ESR, CRP
Urine R/E (renal involvement)
ANA (autoimmune causes)
Skin biopsy

Hematological Examination of Anemia

1️⃣ Complete Blood Count (CBC)

This is the **first and most important investigation.**

✔ Hemoglobin (Hb)

- Confirms anemia
  - <12 g/dL (female)
  - <13 g/dL (male)

✔ RBC Count

✔ Hematocrit (PCV)

✔ RBC Indices

These help classify anemia:

- **MCV**
  - ↓ → Microcytic
  - Normal → Normocytic
  - ↑ → Macrocytic
- MCH
- MCHC
- RDW (variation in size)

2️⃣ Peripheral Blood Smear (PBS)

Very important in viva.

Gives morphology:

🟢 Microcytic hypochromic

- Suggests **Iron deficiency anemia**
- Also seen in **Thalassemia**

🟢 Macrocytic

- Seen in **Vitamin B12 deficiency anemia**
- Also **Folate deficiency**

🟢 Normocytic normochromic

- Seen in:
  - **Aplastic anemia**
  - **Anemia of chronic disease**

🟢 Special findings:

- Target cells → thalassemia
- Sickle cells → **Sickle cell disease**
- Spherocytes → hereditary spherocytosis
- Hypersegmented neutrophils → B12 deficiency

3️⃣ Reticulocyte Count

Shows bone marrow response:

- ↑ Retic count → Hemolysis / acute blood loss
- ↓ Retic count → Bone marrow failure

4️⃣ Additional Hematological Tests (Depending on Type)

🔹 Iron Studies

- Serum ferritin
- Serum iron
- TIBC

🔹 Hemolysis Workup

- LDH
- Indirect bilirubin
- Haptoglobin
- Direct Coombs test

🔹 Bone Marrow Examination

If:

- Pancytopenia
- Suspected leukemia
- Suspected aplastic anemia

Surgery station :
Interactive
Grades of hemorrhoids
Treatment options
of hemorrhoids
Complications of hemorrhoids

1. Bleedingonly
2.
3.
4.

grade 1 & 2: → Sclerotherapy
3 & 4.

→ Rectal prolapse, infection:
→ Thrombosis, Strangulation
Anemia

12:31 PM

- **Clinical Features:**
  - Bright-red painless bleeding (most common + earliest symptom)
  - Blood is not mixed with stools
  - Mucus discharge – Pruritis
  - Prolapse – intermittent lump appearing at anal margin.
  - Pain only on prolapse.

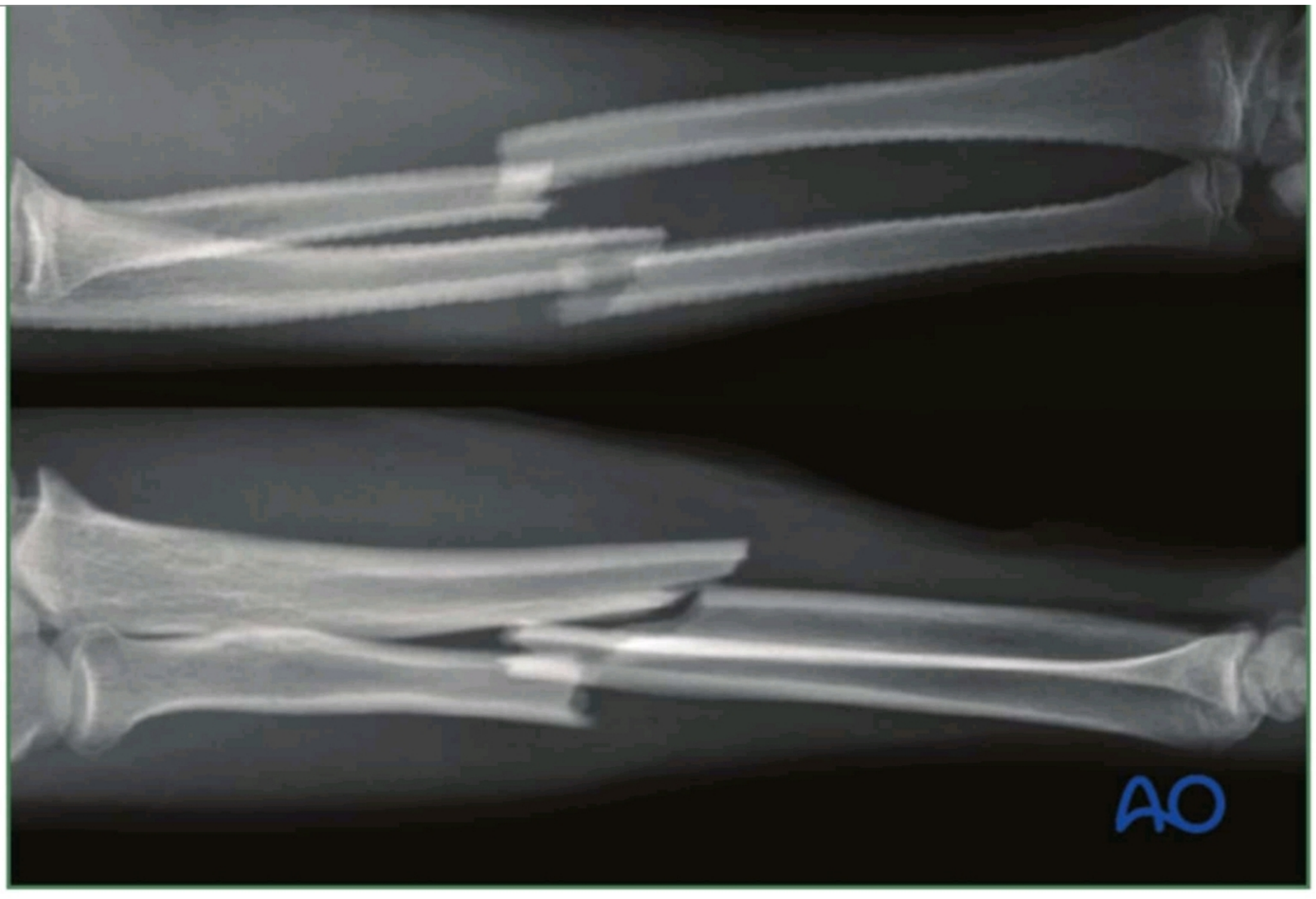
- **Degrees of Hemorrhoids:**
  - First degree : Bleed only, no prolapse
  - Second degree : Prolapse, but reduce spontaneously
  - Third degree : Prolapse and have to be manually reduced.
  - Fourth degree : Permanently prolapsed

- **Complications of Hemorrhoids:**
  - Strangulation and thrombosis
  - Ulceration
  - Gangrene
  - Portal pyaemia
  - Fibrosis

II. Management:

- **General Management:**
  - High fibre diet and stool softeners
  - Use of proprietary creams into the rectum.
  - Suppositories are also useful.
  - Exclude other causes of rectal bleeding.

* Injection Sclerotherapy
* Banding
* Hemorrhoidectomy



Name the fracture?

→ comminuted fracture of both the radius & ulna. in the forearm.

What serious complication would you expect?

- Compartment Syndrome
- Infection
- Neurovascular injury
- loss of forearm function.
- Malunion or Nonunion.
- Volkmann's ischemic Contracture.

How will you manage?

↳ Immobilization.
↳ Assess circulation / nerve function
↳ Pain management.
↳ Check for open wounds
↳ Elevate the limb.

- closed reduction & casting
- ORIF
- External fixation
- Physio.

Radial Nerve

The radial nerve originates from the posterior cord of the brachial plexus (roots C5-T1), supplying motor innervation to the posterior arm and forearm extensors, and sensory input to the skin of the arm, forearm, and hand. It follows a long path through the axilla, spiral groove, and forearm. Kenhub +2

🔵 MOTOR SUPPLY

✅ 1️⃣ In the Arm

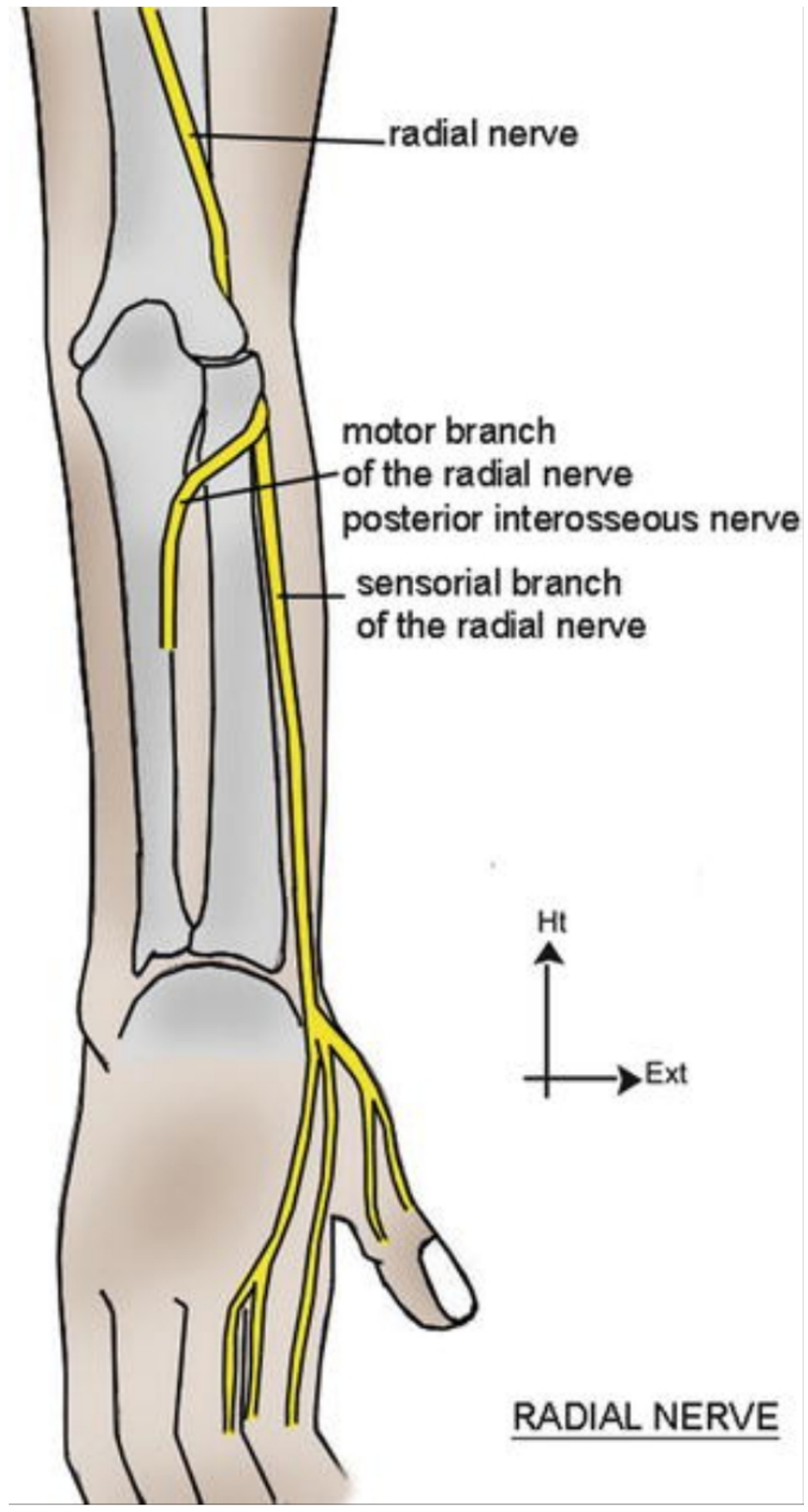
- **Triceps brachii** → Elbow extension
- **Anconeus** → Assists elbow extension
- **Brachioradialis** → Elbow flexion (mid-prone)
- **Extensor carpi radialis longus (ECRL)** → Wrist extension

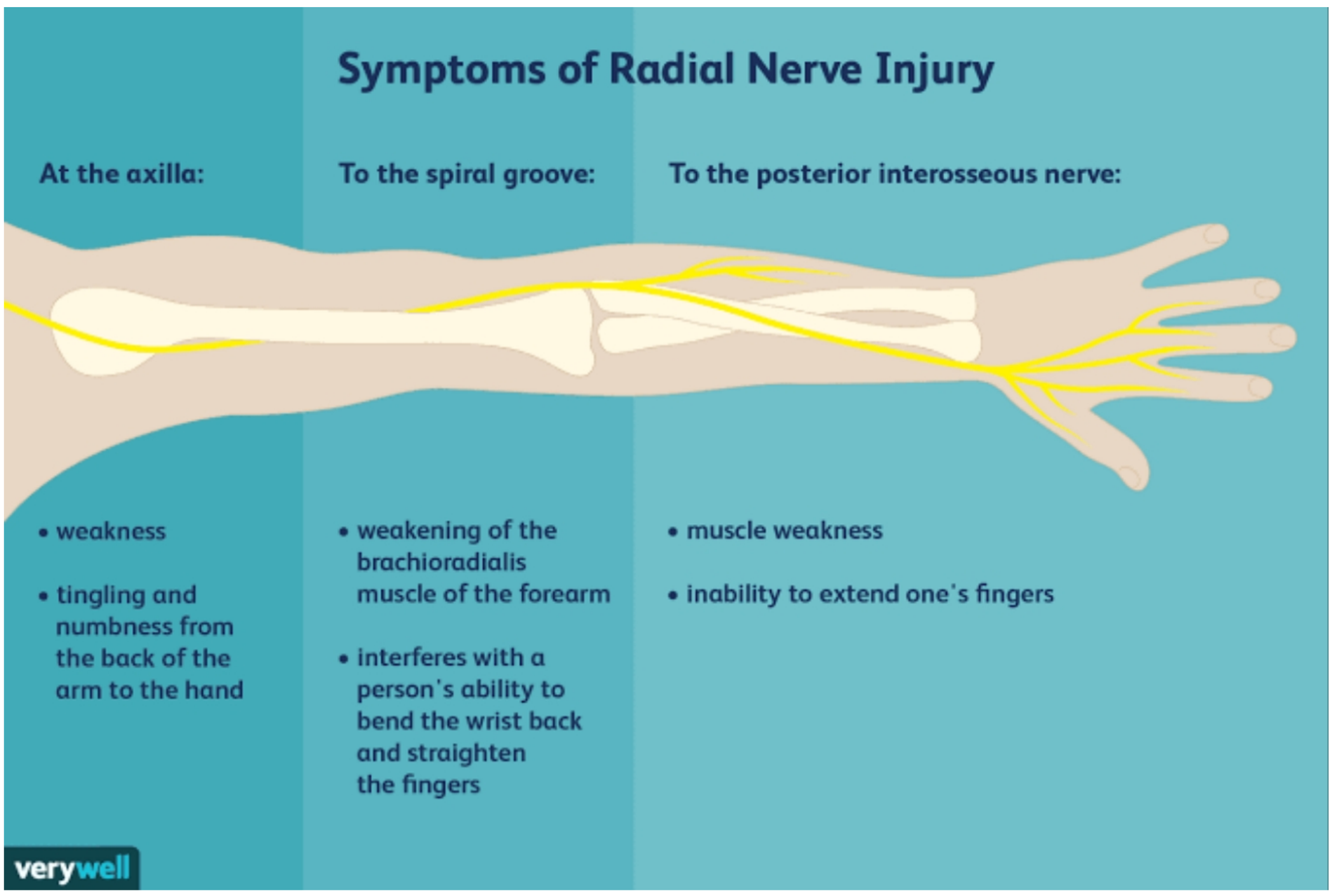
✅ 2️⃣ In the Forearm

(Deep branch → Posterior interosseous nerve)

All extensor muscles of forearm:

- Extensor carpi radialis brevis
- Extensor carpi ulnaris
- Extensor digitorum
- Extensor digiti minimi
- Extensor indicis
- Extensor pollicis longus & brevis
- Abductor pollicis longus
- Supinator





Radial Nerve

🟢 SENSORY SUPPLY

✅ 1️⃣ Arm

- Posterior arm (via posterior cutaneous nerve of arm)

✅ 2️⃣ Forearm

- Posterior forearm (via posterior cutaneous nerve of forearm)

✅ 3️⃣ Hand

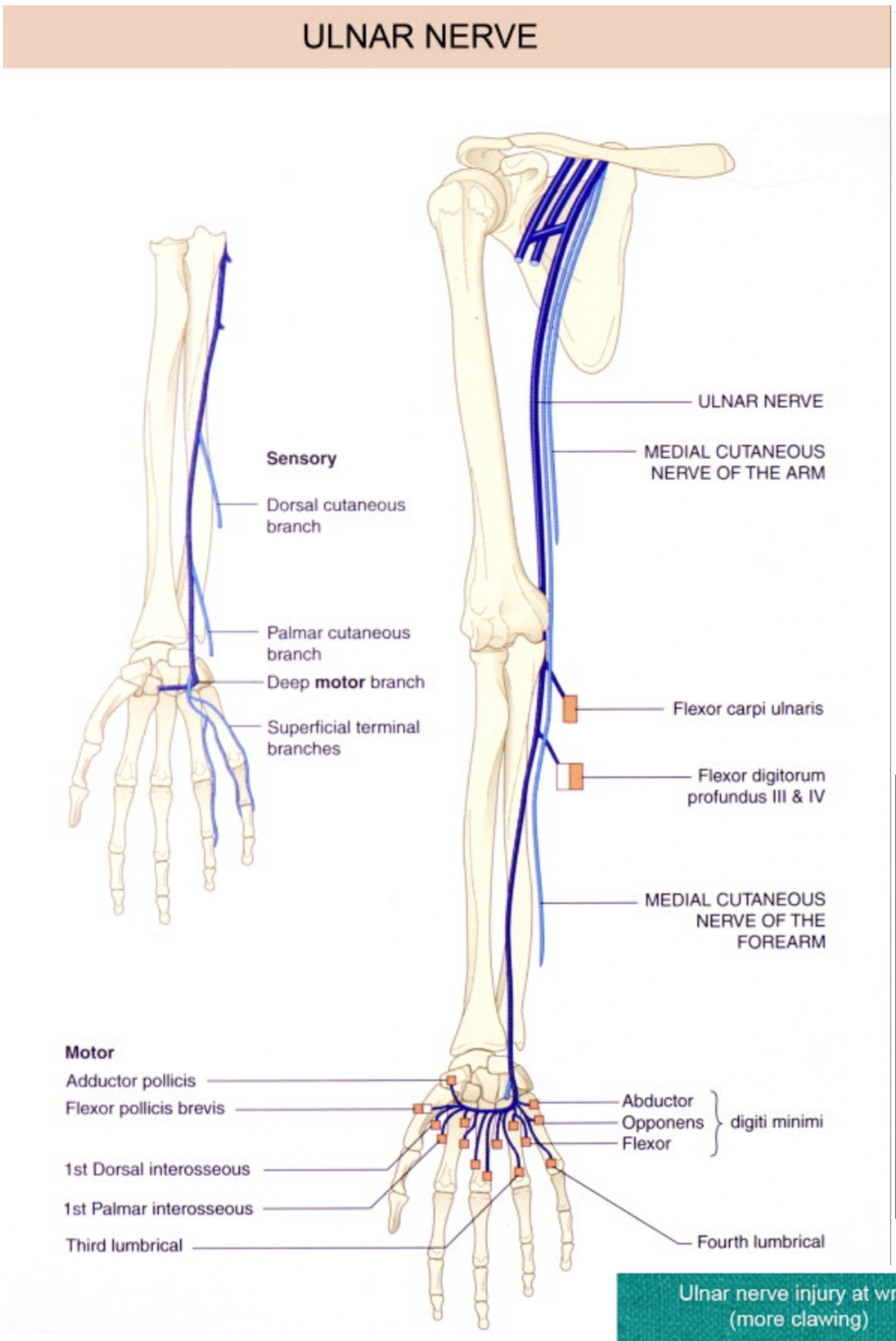
- Lateral dorsum of hand
- Dorsal aspect of:
  - Thumb
  - Index
  - Middle
  - Half of ring finger (proximal part only)

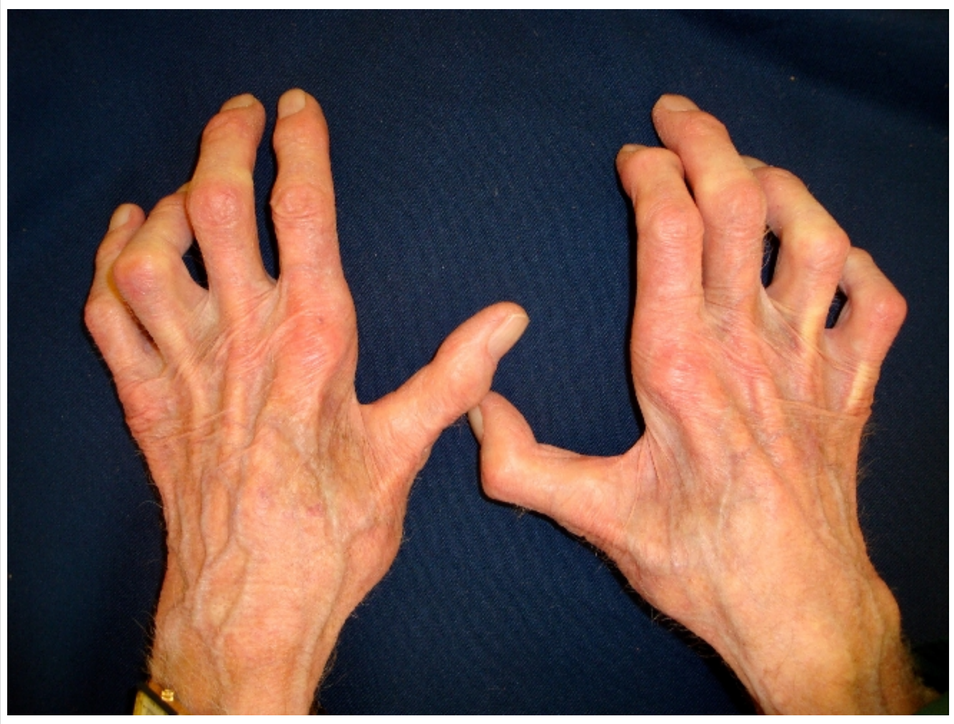
🔑 Function Summary:

- Elbow extension
- Wrist extension
- Finger extension
- Thumb extension
- Supination

👉 **Mnemonic:** Radial nerve = “Extensors”

The ulnar nerve, derived from the medial cord of the brachial plexus (C8-T1), descends the medial arm, passes posterior to the medial epicondyle at the elbow, travels deep to the flexor carpi ulnaris in the forearm, and enters the hand via Guyon's canal to innervate most intrinsic hand muscles and the medial one-and-a-half digits.





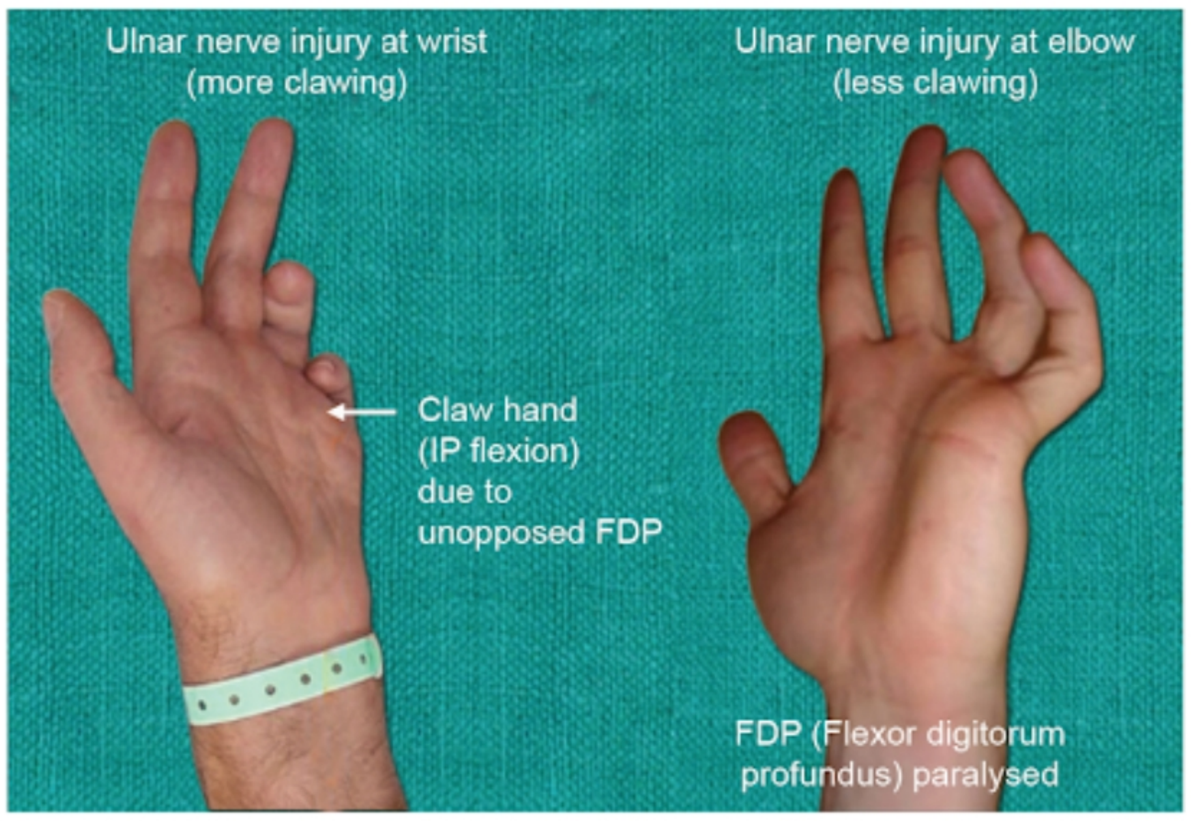


Fig. 27: Simply put, as reinnervation occurs along the ulnar nerve after a high lesion, the deformity will get worse (FDP reinnervated) as the patient recovers—hence the use of the term 'paradox'

🖐 Ulnar Nerve – Motor & Sensory Supply (Exam-Friendly)

The Ulnar nerve arises from the **medial cord of the brachial plexus (C8–T1).**

👉 It mainly supplies **intrinsic muscles of the hand.**

🔵 MOTOR SUPPLY

✅ 1️⃣ In the Forearm

- **Flexor carpi ulnaris (FCU)** → Wrist flexion & ulnar deviation
- **Medial (ulnar) half of flexor digitorum profundus (FDP)** → Flexion of DIP joints of ring & little fingers

---

✅ 2️⃣ In the Hand

(Through deep branch of ulnar nerve)

✋ Intrinsic Hand Muscles

A. Interossei (DAB & PAD)

- Dorsal interossei → Abduct fingers
- Palmar interossei → Adduct fingers

B. Lumbricals (medial 2)

- 3rd & 4th lumbricals

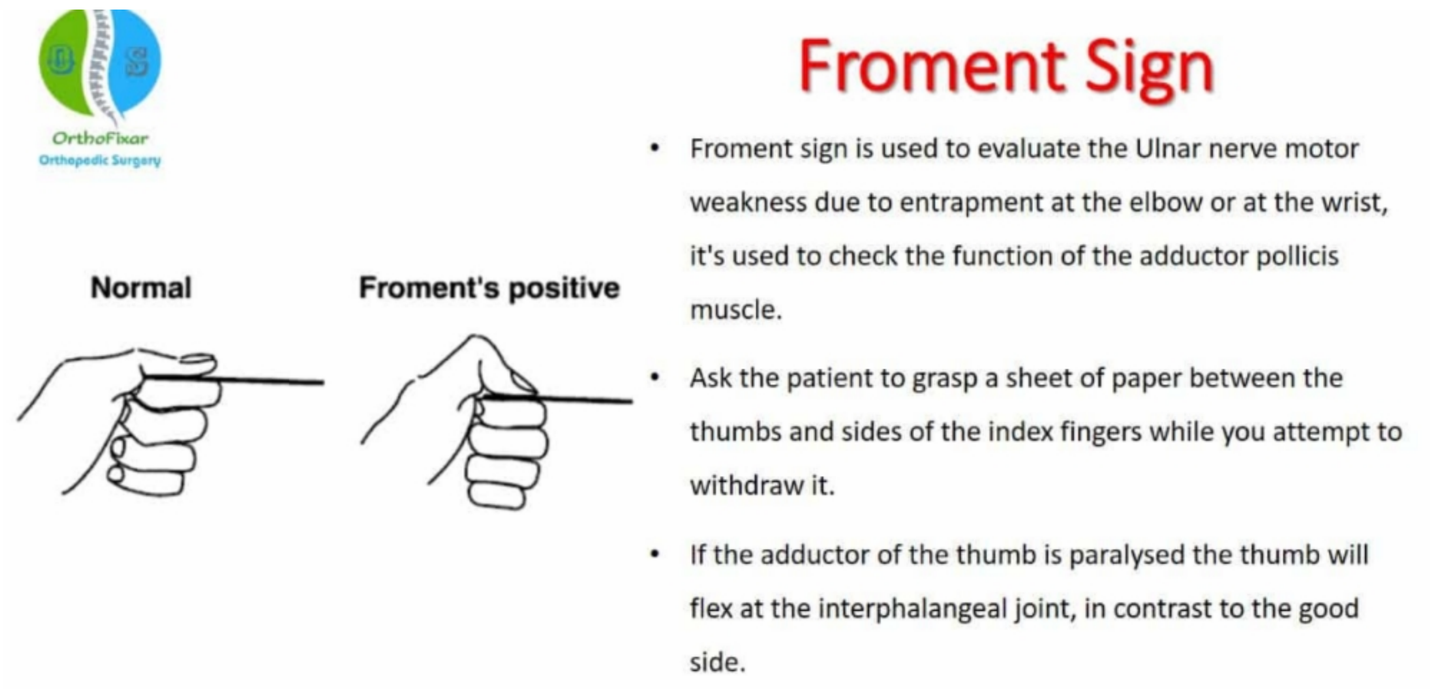
C. Thenar muscle (ulnar supplied)

- Adductor pollicis

D. Hypothenar muscles

- Abductor digiti minimi
- Flexor digiti minimi
- Opponens digiti minimi

E. Palmaris brevis



🟢 SENSORY SUPPLY

✅ Hand

- Medial 1½ fingers (little + half ring finger)
- Both palmar and dorsal surfaces

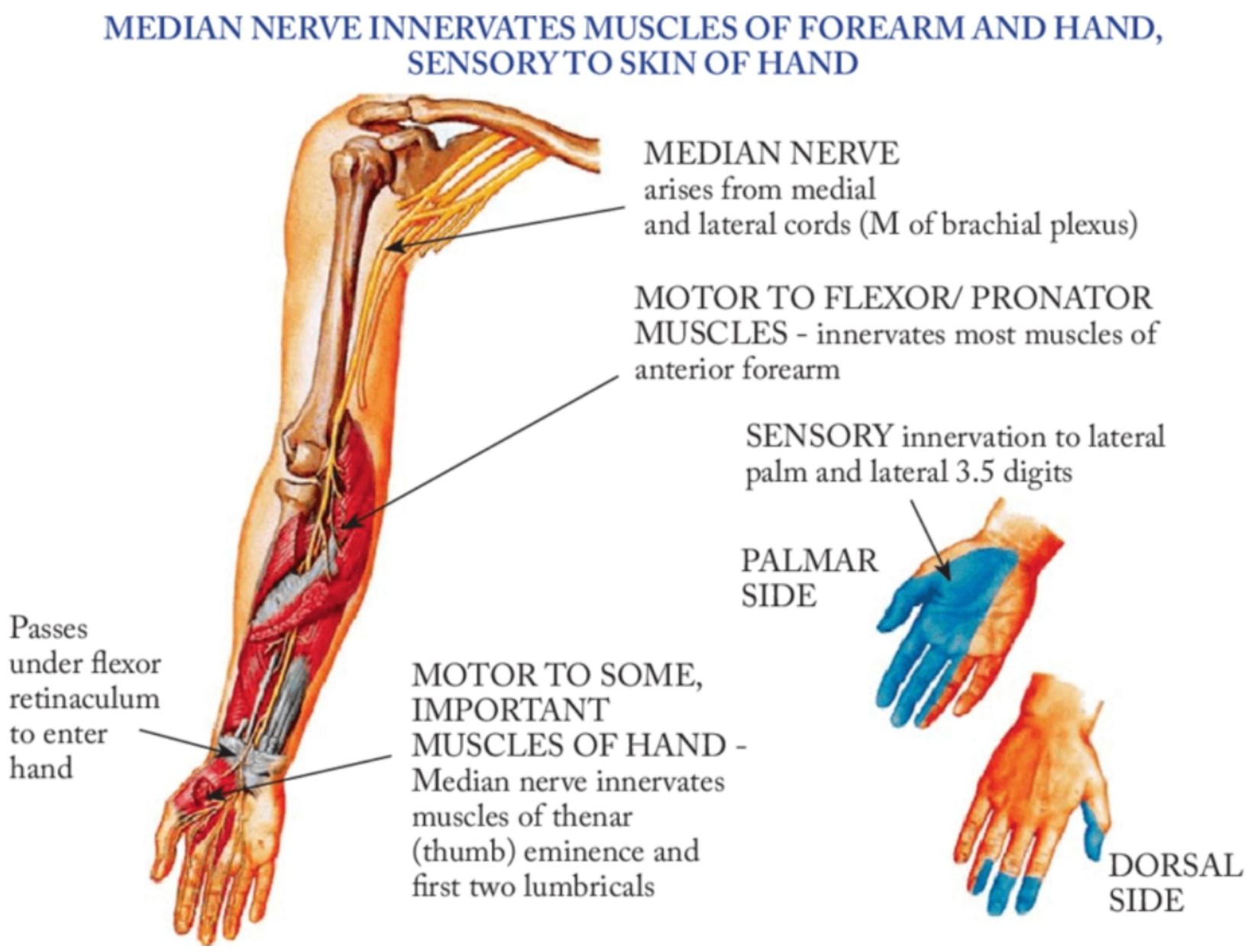
✅ Palm

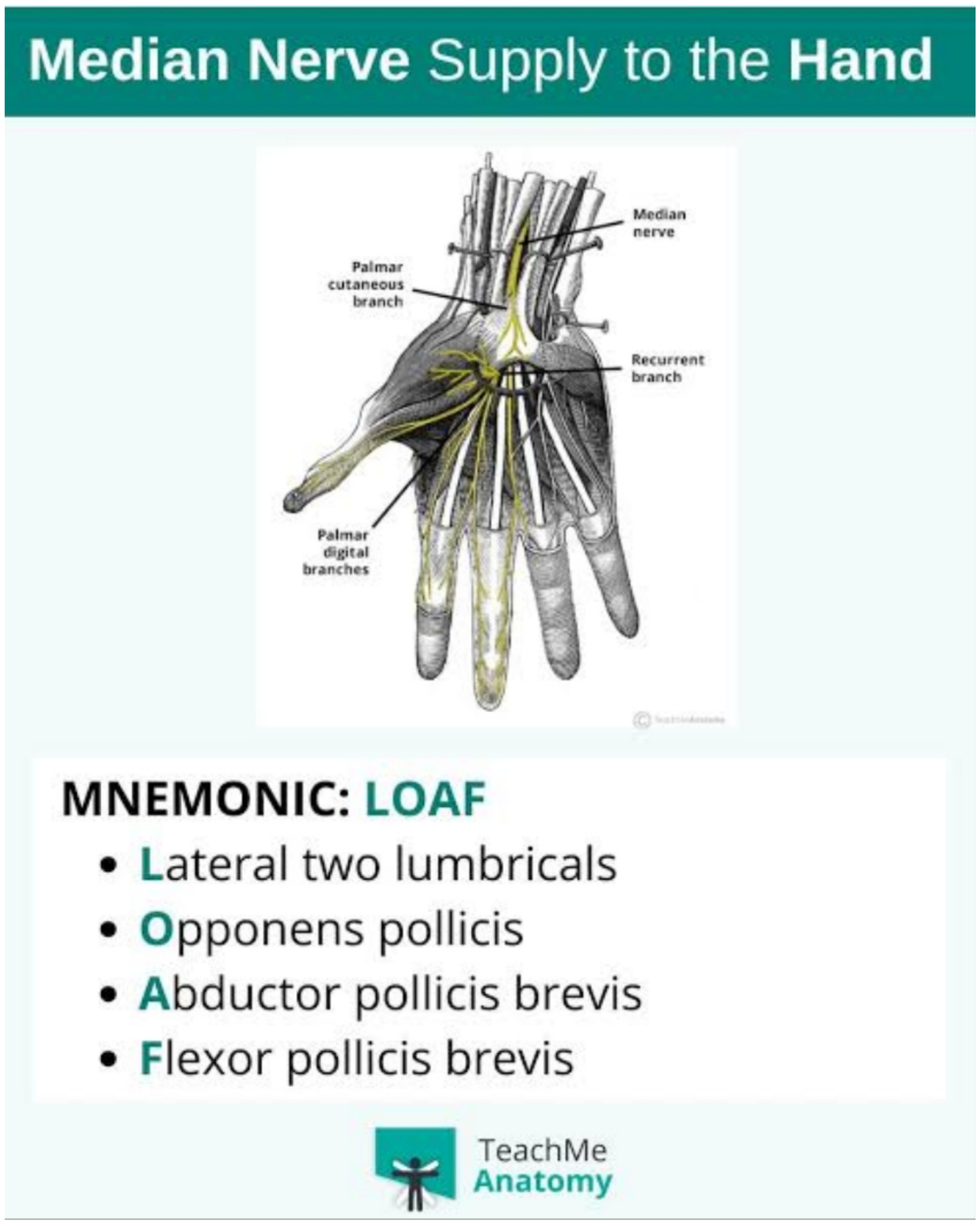
- Medial side of palm

✅ Dorsum

- Medial side of dorsum of hand

The median nerve (roots C5-T1) originates in the axilla from the brachial plexus medial/lateral cords, descends medially along the brachial artery in the arm, passes through the cubital fossa, travels between the flexor muscles in the forearm, and enters the hand via the carpal tunnel, supplying motor/sensory functions to the palm/digits. TeachMeAnatomy +2





🖐 Median Nerve – Motor & Sensory Supply (Exam-Friendly)

The Median nerve arises from the **lateral & medial cords of the brachial plexus (C5–T1)**.

👉 It mainly supplies **most forearm flexors and thenar muscles.**

🔵 MOTOR SUPPLY

✅ 1️⃣ In the Forearm

- All flexor muscles EXCEPT:
  - Flexor carpi ulnaris (ulnar nerve)
  - Medial half of flexor digitorum profundus (ulnar nerve)

✔ Muscles Supplied:

- Pronator teres
- Flexor carpi radialis
- Palmaris longus
- Flexor digitorum superficialis
- Lateral (radial) half of flexor digitorum profundus
- Flexor pollicis longus
- Pronator quadratus

👉 Via **Anterior interosseous nerve** (motor branch):

- Flexor pollicis longus
- Lateral FDP
- Pronator quadratus

✅ 2️⃣ In the Hand (Recurrent branch)

✋ Thenar Muscles:

- Abductor pollicis brevis
- Opponens pollicis
- Flexor pollicis brevis (superficial head)

✋ Lumbricals:

- 1st and 2nd lumbricals (lateral two)

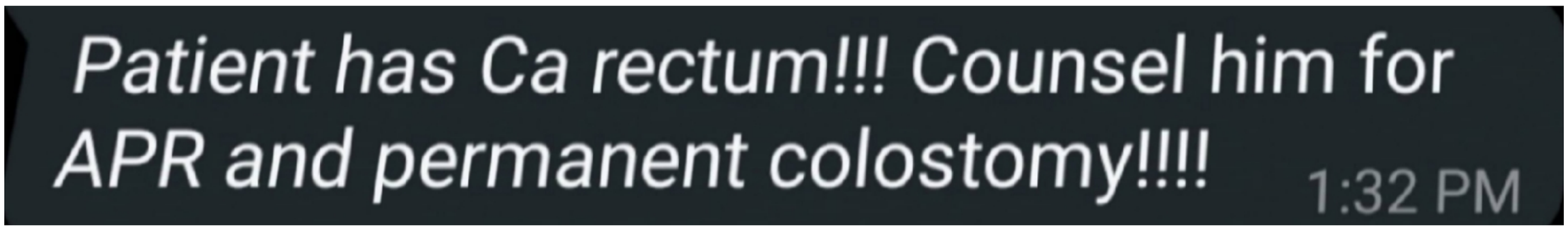
🟢 SENSORY SUPPLY

✅ Palm

- Lateral 3½ fingers
  - Thumb
  - Index
  - Middle
  - Half of ring finger
- Lateral palm

✅ Dorsum

- Tips of lateral 3½ fingers (nail beds)



🩺 Counseling for Carcinoma Rectum – APR & Permanent Colostomy

First, remember:

APR = **Abdominoperineal resection**

1️⃣ Setting the Scene

- Ensure privacy
- Sit at patient's level
- Allow family member if patient wants

"Mr. ___, I would like to discuss your biopsy and treatment options. Is this a good time?"

2️⃣ Assess Understanding

"Can you tell me what you understand about your condition so far?"

3️⃣ Give the Diagnosis (Simple Language)

"Your tests show that you have cancer in the lower part of your rectum. This is called rectal cancer."

Use the term **Colorectal cancer** once if needed.

Pause. Allow reaction.

4️⃣ Explain the Need for Surgery

"Because the tumor is very low in the rectum, the safest and most effective treatment is surgery to remove the affected part completely."

"This surgery is called Abdominoperineal Resection."

5️⃣ Explain What APR Means (Very Important)

"In this operation:

- The lower rectum and anus are removed.
- Because the anus is removed, passing stool normally will not be possible.
- Therefore, we bring a part of the intestine to the abdomen to create a permanent opening called a colostomy."

6️⃣ Explain Permanent Colostomy

"A colostomy means:

- Stool will pass into a bag attached to your abdomen.
- It is permanent.
- The bag is discreet and can be managed easily.
- You can live a normal life, work, travel, and eat most foods."

Reassure about:

- Odor control
- Hygiene
- Social life
- Intimacy concerns (if appropriate)

7️⃣ Benefits

- Complete tumor removal
- Best chance of cure
- Prevents obstruction/bleeding
- Improves survival

8️⃣ Risks (Brief but Honest)

- Bleeding
- Infection
- Wound complications
- Stoma-related problems
- Sexual or urinary dysfunction (important in rectal surgery)

9️⃣ Emotional Support

“I understand this can be overwhelming. Many patients feel anxious about having a permanent stoma. We have trained stoma nurses who will teach you how to manage it comfortably.”

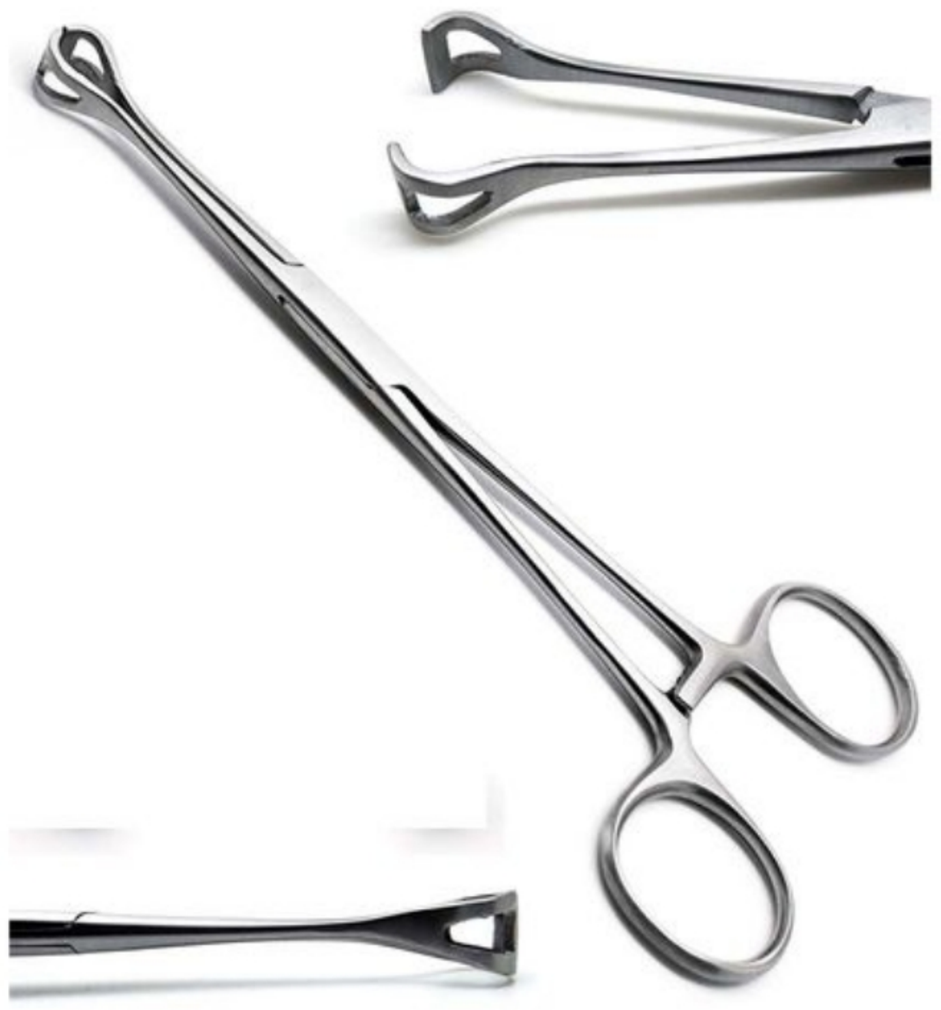
🔟 Alternatives

- In very selected cases: sphincter-saving surgery (if tumor higher)
- Chemotherapy/radiotherapy (as adjunct)
  But explain why not suitable here.

Retractor

Allis Forceps

Plain and toothed forceps



Babcock Forceps

Needle Holder