

Abdominal pain

Introduce yourself , take permission

Patient profile (name , age , occupation , address , marital status)

Chief complaint + duration

Analysis of the Chief Complaint (**SOCRATES**)

Site

Onset (sudden or gradual, progression, first time)

Character

- Colicky - Sharp/stabbing - Burning/pricking - Tearing - Dull

Radiation

- To back

-To testicles/groin

- To shoulders

- Loin to groin

Associated symptoms (finish the CC analysis then ask about them ↓)

Timing (episodic or continuous)

Exacerbating:

- Eating or fasting.
- increased by swallowing.
- fatty foods.
- acidic/spicy foods/coffee.
- Does it increase by movement or breathing?

Relieving:

- Eating or fasting
- Certain position (lying on one side, or leaning forward)
- Bowel motion.
- Drugs

Severity (from 0-10).

Associated symptoms

• GI symptoms:

- Dysphagia, Regurgitation, heart burn, hoarseness of voice.
- Dyspepsia , N+V
- Bloating/abdominal swelling (generalized/localized)
- Early satiety
- Jaundice/ RUQP/ Steatorrhea, urine & stool changes, itching
- Bowel habit, diarrhea/constipation • Flatulence
- Melena and Hematochezia

IBD symptoms: arthralgia, eye symptoms, skin, oral ulcers, bloody diarrhea.

Renal symptoms:

- Loin to groin + flank + colicky: renal stones
- Suprapubic + dysuria: UTI
- Pruritus
- Ankle swelling

❖ **Gynecological + Obstetric symptoms :**

Correlation with menstrual periods • Menorrhagia • Possibility of patient being pregnant • Last Menstrual P.

General

- Fever, weight loss, loss of appetite, night sweat.

Risk Factors (always ask about smoking and alcohol)

Previous abdominal surgery >> intestinal obstruction
Atherosclerosis >> Mesenteric ischemia , AAA

Red Flags of acute abdominal pain: Bleeding (upper GI bleed or lowerGI bleed), Severe pain, Signs of shock, Signs of peritonitis.

Review of systems

Past medical and surgical

- Previous surgeries.
- Hepatitis, or history of blood transfusions, sexual intercourse, contact with jaundiced patient.

Drug Hx: NSAIDs, antacids, use of laxatives..

Family Hx: Ask about relevant conditions related to the history (IBD, PUD ... etc.), and any chronic diseases.

Social Hx: Smoking history (# of pack years), alcohol, travel history

Bleeding per rectum

Introduce yourself , take permission

Patient profile (name , age , occupation , address, marital status)

Chief complaint + duration

Analysis of the Chief Complaint

Onset: - Sudden acute - chronic

Previous episodes

Character:

- **Color:** Mixed with stool, Streak, at the toilet paper

- **Amount** (In cups).

Associated bleeding from other sites

Time: Constant or episodic. / **Progression** (Getting worse or better)

Exacerbating and relieving factors:

- NSAIDs → PUD

- Food → GU

- Trauma to abdomen → Hematoma

Severity:

- **Anemia symptoms** (Fatigue/ SOB/ Palpitations/ Dizziness).

- Assess the **dehydration symptoms** (Feeling thirst/ dry mucous membrane/ oliguria/ altered mental status)

Associated symptoms

I. GI:

A) Dysphagia and odynophagia.

B) Heartburn and regurgitation

C) Dyspepsia

D) Jaundice / change in urine & stool color / itching/ limb swelling→ Cirrhosis

E) Abdominal Pain → Epigastric → PUD

F) Abdominal Distention

H) Diarrhea or constipation

G) Hematochezia/ anal **pain or anal lump**.

II. Blood disorders:

Bleeding from other site, ecchymosis, purpura, petechial, hematuria.

III. Constitutional symptoms: Fever, Weight loss, Anorexia, Night sweat.

Risk Factors (always ask about smoking and alcohol)

I. PUD → Smoking, NSAIDS, Alcohol

II. Bleeding disorders → Drugs {Anti-coagulants (Heparin or Warfarin) / NSAIDS(Aspirin).

III. Chronic constipation → Straining (diverticulosis), hemorrhoids.

IIII. Family hx of IBD or colorectal cancer

Review of systems

Past medical and surgical: GERD, PUD, liver problems, coagulopathy, IBD, Colorectal cancer, previous GI surgery.

Drug Hx: NSAIDs, steroid, aspirin, warfarin

Family Hx: Ask about relevant conditions related to the history (IBD, PUD, colon cancer ... etc.), and any chronic diseases.

Social Hx: Smoking history (# of pack years), alcohol, travel history, drug abuse, **Type of diet**

Breast mass

Introduce yourself , take permission
Patient profile (name , age , occupation , marital status, address)
Chief complaint + duration
HOP
I. Site II. Onset (duration, progression) III. Character 1. MASS (SSSS/ CC/ OOO) 2. Nipple discharge (FCBS A B). a) Palpable/not b) Size/ site/ surface/ shape. c) Color/ Consistency. d) Other breast/ other masses/ other features (Movement), (Skin changes or nipple changes), (Nipple discharge or blood). IV. Radiation. V. Time (Course = Change in time/ Pattern). VI. Severity.
Associated symptoms Malignancy: Constitutional symptoms (Weight loss/ Loss appetite/ Night sweat/ Low grade fever). Gynecological SX: Menarche, Menstrual cycle, Marital status and Breast feeding, Menopause. Infectious causes: Fever, rigors, chills, hotness, tenderness (SOCRATES), redness.
Review of systems
Past medical + Blood transfusion and surgical + Trauma
Drug HX: OCPS, HRT, Previous Radiotherapy .
Family HX: I. Same condition II. Chronic illness (Autoimmune disease)
Social HX: Smoking history (# of pack years), alcohol, travel history, drug abuse.

Nipple discharge DDX:

1. Milky: Either physiological (Lactation) or Pathological (Galactocoele/ hyperprolactinemia).
2. Serous, Brown, Green: Fibroadenosis.
3. Green paste: Duct ectasia.
4. Purulent: Acute breast abscess.
5. Bloody: Duct papilloma, duct carcinoma, duct ectasia, Paget disease, trauma, mastitis.

Breast pain DDX:

1. Inside the breast: Fibroadenosis, acute inflammatory disease, cancer (advanced or infected).
2. Out-side: Angina, pleurisy, rib osteitis ... etc.

Breast mass DDX:

1. Cystic swelling: breast cyst.
2. Solid: 1. Firm: Fibroadenosis. 2. Soft mass: Soft fibroadenoma, breast cancer (Mucinous). 3. Hard: Hard fibroadenoma, Breast cancer (scirrhous), Traumatic, Duct ectasia, chronic breast abscess.

Intermittent Claudication

Introduce yourself , take permission
Patient profile (name , age , occupation , marital status, address)
Chief complaint + duration
HOPI
Site (Unilateral or Bilateral) Onset (sudden or gradual) Character - Cramps – Numbness/ tingling – Bursting. Radiation Associated symptoms: - Color of leg (Normal/ Pale/ Cyanosed). - Temperature (Normal/ cool/ increased). - Edema (Absent/ present). Timing (Course/ Pattern) Exacerbating Factors (Walking/ Rest) Relieving Factors (Rest/ Bending forwards/ Leg elevations) Severity (from 0-10) (How it affects your life? How many steps do you walk before pain is reproduce?).
Review of systems
Past medical and surgical <ul style="list-style-type: none"> Chronic illnesses (DM/ HTN/ Hyperlipidemia/ Stroke/ Angina ..etc.) Previous admission. Blood transfusion. Previous surgery/ Catheterization. Trauma history.
Drug HX: Antiplatelet, Anticoagulant, Anti-hyperlipidemia.
Family HX: Ask about relevant conditions related to the history (HTN/ DM/ Stroke/ MI), Premature coronary artery diseases ($\sigma < 55$, $\text{♀} < 65$).
Social HX: Smoking history (# of pack years), alcohol, travel history, Diet, Home environment.

4.23 The clinical features of arterial, neurogenic and venous claudication

	Arterial	Neurogenic	Venous
Pathology	Stenosis or occlusion of major lower limb arteries	Lumbar nerve root or cauda equina compression (spinal stenosis)	Obstruction to the venous outflow of the leg due to iliofemoral venous occlusion
Site of pain	Muscles, usually the calf but may involve thigh and buttocks	Ill-defined Whole leg May be associated with numbness and tingling	Whole leg 'Bursting' in nature
Laterality	Unilateral or bilateral	Often bilateral	Nearly always unilateral
Onset	Gradual after walking the 'claudication distance'	Often immediate on walking or standing up	Gradual, from the moment walking starts
Relieving features	On stopping walking, the pain disappears completely in 1–2 minutes	Bending forwards and stopping walking Patient may sit down for full relief	Leg elevation
Colour	Normal or pale	Normal	Cyanosed Often visible varicose veins
Temperature	Normal or cool	Normal	Normal or increased
Oedema	Absent	Absent	Always present
Pulses	Reduced or absent	Normal	Present but may be difficult to feel owing to oedema
Straight-leg raising	Normal	May be limited	Normal

Constipation

Introduce yourself , take permission

Patient profile (name , age , occupation , address, marital status)

Chief complaint + duration

Analysis of the Chief Complaint

Onset (sudden or gradual, progression, first time) = **OPP**

Frequency: Times per day

Consistency: (Sausage shape, separate hard lumps like nuts)

Blood:

Caliber: large caliber, narrow or pencil thin stools

Amount (small/large)

Mucous

Pain

Melena

Associated symptoms (finish the CC analysis then ask about them ↓)

Associated symptoms

Constitutional:

- Weight Loss
- Anorexia
- fever
- night sweat

GI: From above to down

- a) Mouth ulcers → IBD
- b) Nausea & Vomiting → Intestinal obstruction
- c) Abdominal pain >> Intestinal obstruction, IBD
- d) Abdominal distention → IBS, Intestinal obstruction
- e) Alternating diarrhea → IBS
- f) Anal pain or itching → Hemorrhoid, Perianal fissure

MSS

Skin rash, Joint Pain, Eye Symptoms

Hypothyroidism : Cold intolerance, Weight Gain , fatigue.

DM : Polyuria, Polydipsia, Polyphagia

Hypercalcemia : Renal stones , bone pain , polyuria , abdominal pain.

Dehydration : feeling thirst , dark urine , oliguria

Risk factors

- I. IBD → Family hx
- II. Colon CA → Low fiber diet, family hx
- III. Intestinal obstruction (Adhesions) → Previous surgeries

Review of systems

Past medical and surgical

- Previous attacks
- Previous surgeries → Intestinal obstruction (Adhesions)
- Chronic illness
- (DM, HTN, Hyperlipidemia) , Hx of trauma (spinal cord)

Drug Hx: →Iron and Ca supplement , opioids , thiazides , Antacids

Family Hx: Ask about relevant conditions related (IBD , Colon CA) and any chronic diseases.

Social Hx: Smoking history (# of pack years), alcohol , travel history , Diet and water intake



Clinical round in surgery

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Clinical Round History

Dysphagia

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Dysphagia (Etiology)

- Subjective sensation of difficulty or abnormal swallowing.
- Two main classes:

1. Oropharyngeal:

Difficulty in initiating a swallow, associated with choking, coughing, aspiration and globus sensation.

Usually due to Variety of neurological, structural, infectious, and iatrogenic cause.

2. Esophageal:

- Motility disorders.
- Structural lesions.
- Esophagitis.

Dysphagia (Clinical presentation)

1. Oropharyngeal dysphagia:

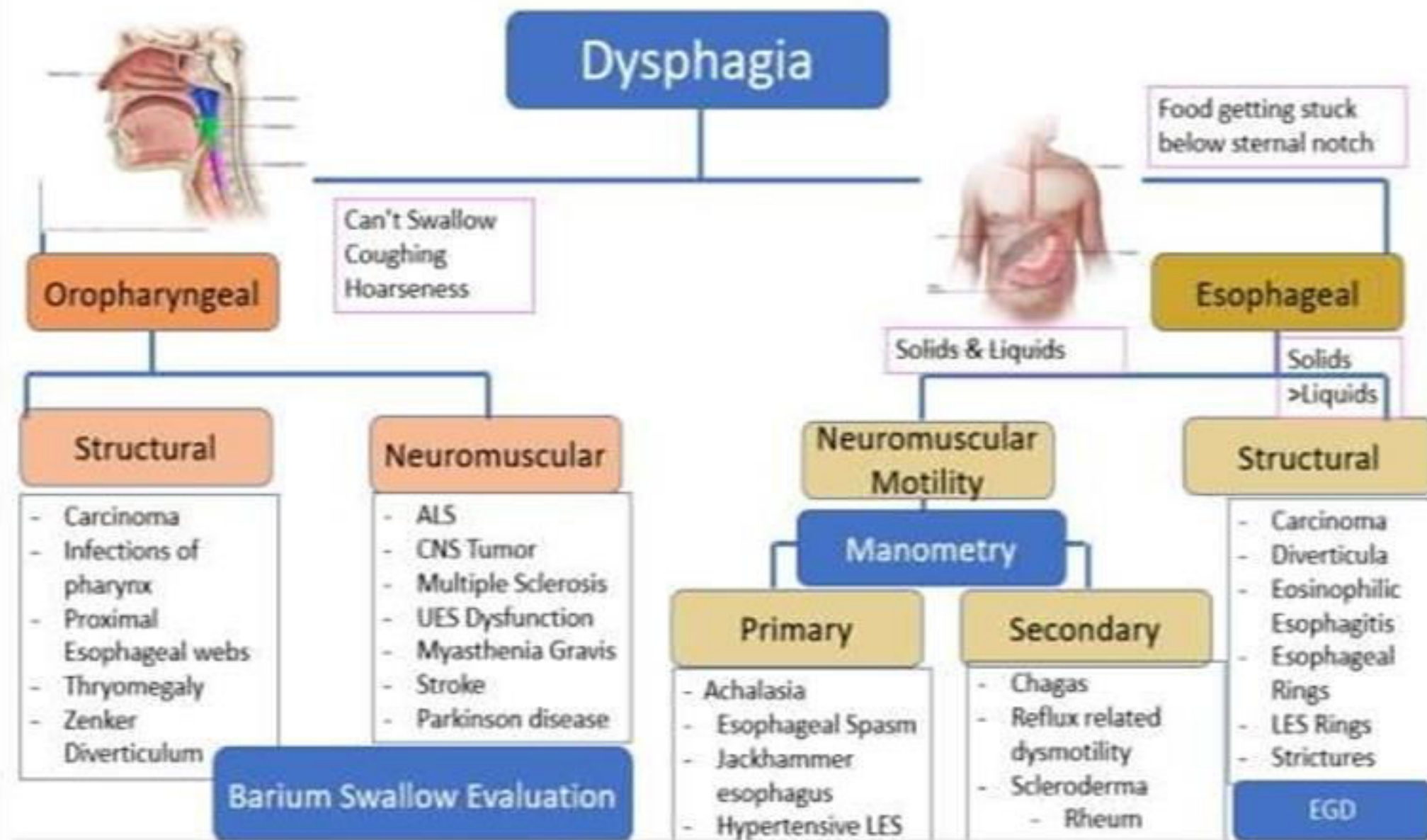
- Difficulty in initiating a swallow, associated with choking, coughing, aspiration and globus sensation.

2. Esophageal dysphagia:

Difficulty in swallowing seconds after initial swallow, associated with Sensation of food in esophagus.

Solid and liquid { Motility disorders}.

Solid more { Structural}



Dysphagia (Work-up)

- **Esophageal dysphagia:**

1. Upper Endoscopy (generally first done to rule out structural lesions).
2. Barium swallow.
3. Manometry.

- **Oropharyngeal dysphagia:**

1. Modified barium swallow (Investigations oral, pharyngeal, and esophageal).

Achalasia

- **Failure of LES to relax:**
- (idiopathic/ autoimmune/ Chagas/ malignancy).
- **Diagnosis:**
- (EGD/ Manometry/ Barium swallow (rate-tail)).
- **Manometry:**

Incomplete LES relaxation, Elevated resting pressure (>45 mmHg), Aperistalsis of esophageal body.

- **Management:**

(Drugs (CCB/NITRATE), Botox, Pneumatic dilation, Surgical myotomy (95% in first year)).



Esophageal cancer



- Two types:

1. **Squamous cell carcinoma** (upper 2/3, Smoking/ ETOH/ Achalasia/ Strictures/ dietary(N-nitroso), 50%, metastasis to cervical and mediastinal LN).

2. **Adenocarcinoma**: (Distal 1/3, Barret's/ LONGSTANDING GERD/ ETOH, 50%, Metastasis to celiac and gastric LN).

- **CLX**: Progressive dysphagia (Solids then liquids) + Constitutional symptoms + RS symptoms + Horsiness.

- **DX**: EGD with BX, CT(staging), PET.

- **TRX**: Surgery + Chemo-radiotherapy.

- **Poor prognosis because of late presentation.** (5-YR = 5%-30%)



Thank you

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Epigastric pain

Introduce yourself , take permission

Patient profile (name , age , occupation , address , marital status)

Chief complaint + duration

Analysis of the Chief Complaint (**SOCRATES**)

Site

Onset (sudden or gradual, progression, first time)

Character

- Squeezing - Sharp/stabbing - Burning/pricking - Dull

Radiation

- To back
- To Right shoulder, scapula
- Up to chest
- Diffuse

Associated symptoms (finish the CC analysis then ask about them ↓)

Timing (episodic or continuous)

Exacerbating:

- Eating or fasting.
- increased by swallowing.
- fatty foods.
- acidic/spicy foods/coffee.
- Does it increase by movement or breathing?

Relieving:

- Eating or fasting
- Certain position (lying on one side, or leaning forward)
- Bowel motion.
- Drugs

Severity (from 0-10).

Associated symptoms

- **GI symptoms:**
- Dysphagia, Regurgitation, heart burn, hoarseness of voice.
- Dyspepsia , N+V
- Bloating/abdominal swelling (generalized/localized)
- Early satiety
- Jaundice/ RUQP/ Steatorrhea, urine & stool changes, itching
- Bowel habit, diarrhea/constipation • Flatulence
- Melena and Hematochezia

• **Heart symptoms:** Chest pain, sweating, SOB, PND, orthopnea, ankle swelling,.

• **Respiratory symptoms:** Cough, SOB, wheeze.

General

• Fever, weight loss, loss of appetite, night sweat.

Risk Factors (always ask about smoking and alcohol)

I. PUD → Smoking, NSAIDS, Alcohol

II. Hepatitis → Alcohol, blood Transfusion, HBV infection, DM, contact with patient having Hepatitis

III. MI → Smoking, HTN, DM, Hyperlipidemia, Family Hx

IV. Cholecystitis→ Family Hx of gall bladder stones

Review of systems

Past medical and surgical

• Previous surgeries.

• Hepatitis, or history of blood transfusions, sexual intercourse, contact with jaundiced patient.

Drug Hx: NSAIDs, Steroids ,antacids, anticoagulant.

Family Hx: Ask about relevant conditions related to the history (Gastric cancer, PUD ... etc.), and any chronic diseases.

Social Hx: Smoking history (# of pack years), alcohol, travel history

Hematemesis

Introduce yourself , take permission

Patient profile (name , age , occupation , address, marital status)

Chief complaint + duration

Analysis of the Chief Complaint

Onset: - Sudden acute - chronic

- insidious onset of vomiting

Progression (Getting worse or better)

Previous episodes

Character:

smell

Color (Fresh bright red, Dark color "coffee grounds").

Amount (In cups).

Associated bleeding from other sites

Time: Constant or episodic.

Exacerbating and relieving factors:

- NSAIDs → PUD

- Food → GU

- Trauma to abdomen → Esophageal perforation

- Alcohol, Vomiting/retching → Mallory-Weiss tear

Severity:

Associated symptoms

I. GI:

a) Heartburn and regurgitation

B) Dysphagia and odynophagia.

C) Dyspepsia

D) Abdominal Pain → Epigastric → PUD

E) Abdominal Distention

f) Jaundice / change in urine & stool color / itching/ limb swelling→ Cirrhosis

g) Diarrhea or constipation

h) Hematochezia/ anal pain or anal lump.

II. Blood disorders: Bleeding from other site, ecchymosis, purpura, petechial, hematuria.

III. Constitutional symptoms: Fever, Weight loss, Anorexia, Night sweat.

Risk Factors (always ask about smoking and alcohol)

I. PUD → Smoking, NSAIDS, Alcohol

II. Bleeding disorders → Drugs {Anti-coagulants (Heparin or Warfarin) / NSAIDS (Aspirin).

III. Cirrhosis → Alcohol, Blood transfusion, HBV infection, sexual intercourse, easy bruising, leg swelling.

III. Mallory–Weiss >> binge drinking

Review of systems

Past medical and surgical: GERD, PUD, liver problems, coagulopathy, IBD, Colorectal cancer, previous GI surgery, AAA repair (Aorto-enteric fistula).

Drug Hx: NSAIDs, steroid, aspirin, warfarin

Family Hx: Ask about relevant conditions related to the history (Gastric cancer, PUD, colon cancer ... etc.), and any chronic diseases.

NECK MASS

Introduce yourself , take permission
Patient profile (name , age , occupation , marital status, address)
Chief complaint + duration
Analysis of the Chief Complaint (SOCRATES)
I. Site a) Central → Thyroid enlargement, Thyroglossal cyst. b) Lateral → Lymphadenopathy, branchial cyst. II. Onset (duration, progression) III. Character a) Consistency. b) Tenderness, redness, hotness. c) Mobility. d) Movement with swallowing. IV. Radiation. V. Time (Course/ Pattern). VI. Severity.
Associated symptoms I. Lymphadenopathy a) URTI → Fever & Chills, Sore throat, Cough, Nasal discharge. b) TB → Fever, Hemoptysis, Night sweats, Weight loss. c) Lymphoma or Leukemia → SOB, Fatigue, Bleeding tendency, Recurrent infections, Bone pain. d) Sarcoidosis → SOB, Skin lesions, Joint pain, Uveitis. II. Thyroid a) Hyperthyroidism (Grave's disease, Toxic Multinodular goiter) Symptoms due to mass effect → Breathing difficulty, Hoarseness of voice, Dysphagia, Chronic sore throat. Symptoms due to Hyperthyroidism → Fatigue, Sweating, Weight loss, Increased appetite, Headache, Restlessness, Palpitation, Diarrhea, Heat intolerance. b) Hypothyroidism (Hashimoto's thyroiditis, Iodine deficiency) Slow speech, Hoarseness of voice, Decreased appetite, Weight gain, Constipation. c) Malignancy: Constitutional symptoms, other masses.
Review of systems
Past medical + Blood transfusion and surgical + Trauma
Drug HX: Amiodarone, Previous Radiotherapy .
Family HX: I. Same condition II. Chronic illness (Autoimmune disease)
Social HX: Smoking history (# of pack years), alcohol, travel history, drug abuse, contact with sick people or elderly

(DDX: Lymphadenopathy: (TB / Sarcoidosis / Lymphoma / Metastasis / URTI), Thyroid enlargement: (Multinodular goiter / Grave's disease / Thyroid CA)).

Investigations: 1. Biopsy 2. Thyroid function test (TFT) 3. Neck US.

DYSPHAGIA

Introduce yourself , take permission
Patient profile (name , age , occupation , marital status, address)
Chief complaint + duration (odynophagia?!!!)
Analysis of the Chief Complaint
Site: At what level does the food stick Onset: (sudden or gradual) Character Fluids, Solids or both (at the same time!), Stage the dysphagia occurs: initiating swallowing, after initiation swallowing? Associated symptoms (finish the CC analysis then ask about them ↓) Timing (Progression, episodic (intermittent) or continuous) Severity (Is there complete obstruction , regurgitation?)
Associated symptoms Constitutional: - Weight loss - Loss of appetite - Night sweat. - fever URTI: Cough, nasal congestion, sore throat. Neurological: vision problem, tremor, Recurrent choking (previous strokes). GI: Nausea/vomiting, Regurgitation, heart burn, Bloating/abdominal swelling, Early satiety, Jaundice/ RUQP/ Steatorrhea, Bowel habit, Melena and Hematochezia. Scleroderma: Skin tightness and discoloration (Raynaud Phenomenon). Myasthenia gravis: Ptosis, diplopia, fatigue Pharyngeal pouch (zenker diverticulum) Neck bulge , gurgle on drinking or halitosis ?
Review of systems
Past medical +Blood transfusion and surgical +Trauma. • Stroke • Thyroid problems (Goiter) • PUD and GERD •Scleroderma •Iron deficiency. • Previous admission. • Previous surgeries.
Drug HX: → • NSAIDs • Bisphosphonates/Doxycycline •Use of antacids (related to GERD and PUD).
Family HX: Esophageal cancer, neuromuscular diseases , any chronic illnesses
Social HX: • Alcohol (peptic ulcer disease, gastritis) • Smoking • Illicit drug use • Diet: spicy foods (peptic ulcer disease)

(DDX: URTI, Esophageal cancer, Achalasia, Scleroderma, Neurological, GERD, PUD)

Investigations:

1. Manometry, Barium swallow
2. Upper endoscopy
3. 24 PH monitoring
4. Anti Ach antibodies

Jaundice

Introduce yourself , take permission

Patient profile (name , age , occupation , marital status)

Chief complaint + duration

Analysis of the Chief Complaint

I.Site

- a) Eyes (Sclera)
- b) Skin

II. Onset (sudden or gradual, progression, first time) OPP

III. Associated symptoms (finish the CC analysis then ask about them ↓)

IV. Exacerbating and relieving factors (Drugs, exercise, fasting, certain foods like fava beans).

V. Time: Intermittent (e.g. Gilbert's syndrome), continuous.

Associated symptoms

I.Prehepatic : Hemolytic Anemia → Fatigue, Dizziness, Pallor, SOB.

II. Hepatic :

a) Hepatitis → Fever, RUQ pain, Nausea & Vomiting
Autoimmune → Arthralgia, vitiligo, skin rashes

b) Cirrhosis → Ascites, Limb swelling, Bleeding tendency , Hematemesis , Anal lump

III. Post hepatic : - Obstructive Jaundice→ Itching , Dark urine and pale stool

- Constitutional (Periampullary tumor):

- Weight Loss - Anorexia - night sweat - steatorrhea – DM

IV. GI Sx : from above to below.

Risk factors: (always ask about smoking and alcohol)

1-Pre-hepatic: Hx of blood diseases (Thalassemia / G6PD), **Drugs** → **PAINS** (Primiquine , Aspirin , Isonizid ,Nitrofurantoin, Sulfa drugs)

2- Hepatic: , Hx of hepatitis , Hx of blood Transfusion, or contact w/ jaundiced patient

3- Post-hepatic: Hx of gallstones, Hx of cholecystitis, Hx of **IBD** (Crohn's)

Past medical and surgical

- Previous surgeries
- Chronic illnesses (DM, HTN, Hyperlipidemia)

Drug Hx: → **PAINS** (Primiquine , Aspirin , Isonizid ,Nitrofurantoin, Sulfa drugs) , OCPs

Family Hx: Hx of blood diseases (Thalassemia / G6PD) , Hepatitis and liver failure . and any chronic diseases.

Social Hx: Smoking history (# of pack years), alcohol , Drug abuse ,travel history , Sexual history



Clinical round in surgery

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Clinical Round History

Neck masses

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Neck mass (Etiology)

1. What is the usual etiology in infants?

Congenital (branchial cleft cysts, thyroglossal duct cysts)

2. What is the usual etiology in adolescents?

Inflammatory (cervical adenitis is #1), with congenital also possible

3. What is the usual etiology in adults?

Malignancy (squamous is #1), especially if painless and immobile

4. What is the “80% rule”?

In general, **80% of neck masses are benign in children; 80% are malignant in adults >40 years of age.**

Neck mass(Clinical presentation)

- What are the **seven cardinal symptoms** of neck masses?

1. Dysphagia.
2. Odynophagia.
3. Hoarseness.
4. Stridor (signifies upper airway obstruction).
5. Globus.
6. Speech disorder.
7. Referred ear pain (via CN V, IX, or X).

Neck mass (Work-up)

- What comprises the workup?

Full head and neck examination, indirect **laryngoscopy**, **CT scan and MRI, FNA** for tissue diagnosis; **biopsy contraindicated** because it may adversely affect survival if malignant.

- What is the workup of node-positive squamous cell carcinoma and no primary site?

Triple endoscopy (laryngoscopy, esophagoscopy, bronchoscopy) and **biopsies of likely sites, PET scan.**

Neck mass (DDX)

- What is the differential diagnosis?

Inflammatory: cervical lymphadenitis, cat-scratch disease, infectious mononucleosis, infection in neck spaces.

Congenital: thyroglossal duct cyst (midline, elevates with tongue protrusion), branchial cleft cysts (lateral), dermoid cysts (midline submental), hemangioma, cystic hygroma.

Neoplastic: primary or metastatic.

Dark mass (DDX)

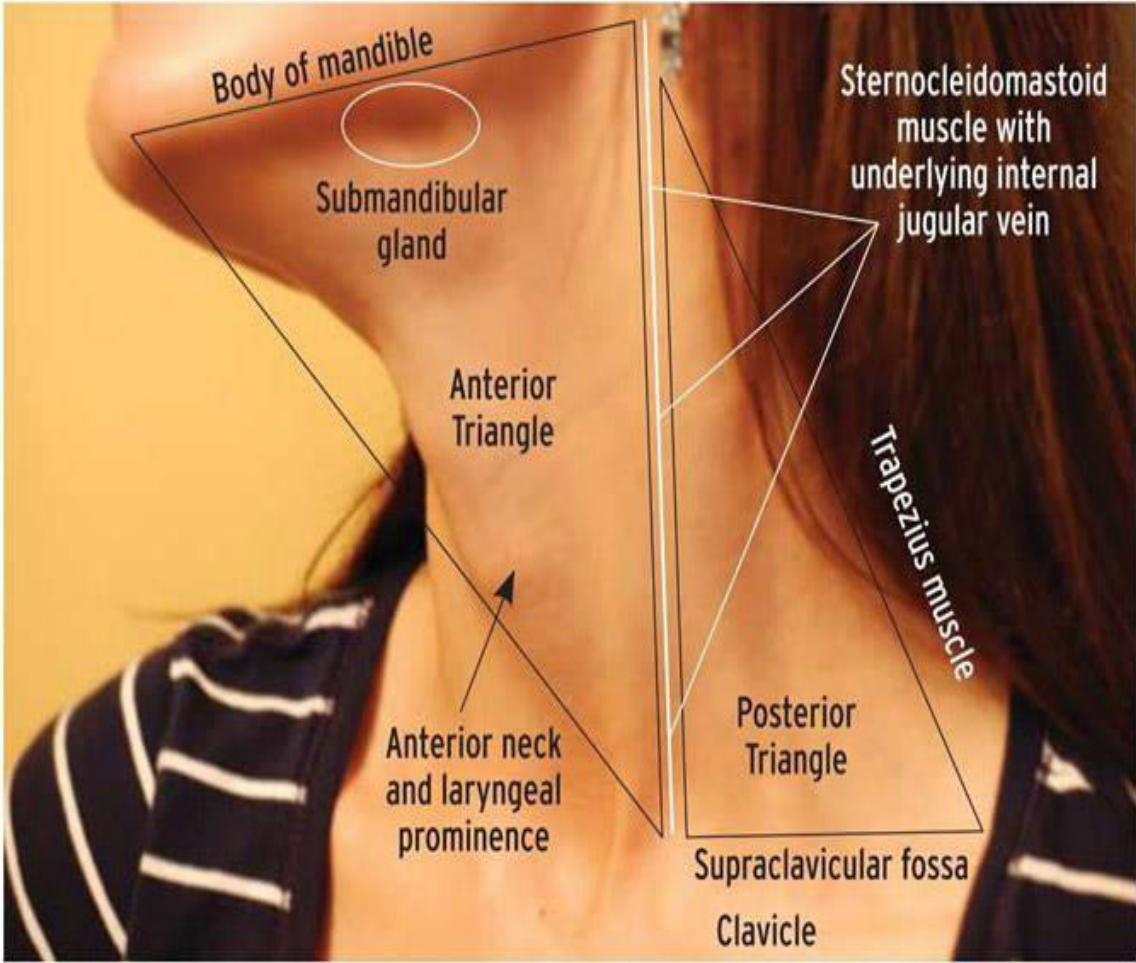


FIGURE 1. The anatomic divisions of the lateral neck

Location		
Mid line	Ant. Triangle	Post. Triangle
<u>Congenital</u> -thyroglossal duct cyst -dermoid cyst -laryngocele	<u>Congenital</u> -brachial cleft cyst -thymic cyst -sialadenopathy (parotid,submandibular)	<u>Congenital</u> -lymphangioma
<u>Inflammation</u> -adentitis	<u>Inflammation</u> -adenitis(viral,bact., granulomatous) -sialadenitis	<u>Inflammation</u> -adenitis(viral,bact., granulomatous)
<u>Tumor</u> -thyroid -lymphoma	<u>Tumor</u> -metastatic -upper jugular -submandibular -middle jugular -lymphoma -vascular(carotid tumor, hemangioma)	<u>Tumor</u> -lymphoma -metastatic -supraclavicular
<u>Other</u> -sternocleidomastoid hematoma/fibroma	<u>Other</u> - False aneurysm	<u>Other</u> Neuroma

Neck mass (Management)

- **Surgical excision for congenital or neoplastic**; two most important procedures for cancer treatment are selective and modified neck dissection.
- What is the role of adjuvant treatment in head and neck cancer?
Postoperative chemotherapy/XRT.



Thank you

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Diarrhea

QMA Team

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Etiology

- Pass of **more than three times** per-day of loose stool.
- The definition is **relative** to each patient normal habits.
- It could be **three types** according to onset:
 1. **Acute**: 2 weeks or less.
 2. **Subacute**: 2-4 weeks.
 3. **Chronic**: more than 4 weeks.

DDX

- **GI causes:**

1. **Tract abnormality:** Infectious, inflammation (allergy), IBS??.
2. **Food:** High fiber diet.
3. **Enzymatic causes:** when we loss enzyme such as 1. Steatorrhea (Loss of pancreatic/ liver enzymes). 2. lactase deficiency.

- **Non GI causes:**

1. Hyperthyroidism.
2. DM.
3. Drugs.

History evaluation

- Diarrhea must be distinguished from **fecal incontinence, change in stool caliber, rectal bleeding, and small, frequent**, but otherwise normal stools.
- Careful **medication** history is essential.
- Alternating diarrhea and constipation suggests **fixed colonic obstruction (e.g., from carcinoma) or irritable bowel syndrome**.
- A sudden, **acute course, often with nausea, vomiting, and fever**, is typical of viral and bacterial infections, diverticulitis, ischemia, radiation enterocolitis, or drug induced diarrhea and may be the initial presentation of inflammatory bowel disease.
- **More than 90% of acute diarrheal illnesses are infectious in etiology.**

History evaluation

- A longer (>4 weeks), more insidious course suggests **malabsorption, inflammatory bowel disease, metabolic or endocrine disturbance, pancreatic insufficiency, laxative abuse, ischemia, neoplasm** (hypersecretory state or partial obstruction), or **irritable bowel syndrome. Parasitic and certain forms of bacterial enteritis can cause chronic diarrhea.**
- Particularly **foul-smelling or oily stool suggests fat malabsorption. Fecal impaction may cause apparent diarrhea** because only liquids pass partial obstruction.
- Several infectious causes of diarrhea are associated with **an immunocompromised state.**

Thank you

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DIARRHEA

Introduce yourself , take permission
Patient profile (name , age , occupation , marital status)
Chief complaint + duration
Analysis of the Chief Complaint (FCBCAO)
Frequency how many times a day? Character (mucus (greasy) or watery) Blood (fresh blood (hematochezia) , melena) Color (fatty . pale) Amount Odor (foul smelling) Onset (duration, sudden or gradual, progression, first time) = OPP Associated symptoms (finish the CC analysis then ask about them ↓) Timing (episodic (at night) or continuous) Exacerbating: - Dietary factors, fatty foods (gallstones), (Gastric ulcer disease). Relieving: Bowel motion (defecation) Drugs. Severity → dehydration symptoms (thirst . oliguria , dark urine, Dry mucous membranes)
Associated symptoms <ul style="list-style-type: none"> • GI symptoms <ul style="list-style-type: none"> a) Mouth ulcers → IBD, Celiac Disease b) Nausea & Vomiting → GE, PUD (if bloody vomit) c) Abdominal pain → GE, IBD (Crohn's), Celiac disease, CA d) Abdominal distention + Alternating constipation → IBS • Constitutional Fever , wt loss , night sweat , loss of appetite • MSS Skin rash , Joint Pain , Eye Symptoms.
Risk Factors (always ask about smoking and alcohol) I. GE → Eating anything spoiled II. Bacillary dysentery / ameba → Recent travel to endemic area III. IBD → Family hx IV. Colon CA → Low fiber diet, family hx V. Celiac → Family hx and hx of allergy
Review of systems
Past medical and surgical <ul style="list-style-type: none"> • Previous surgeries. • Previous attacks • Chronic illnesses (DM, HTN, Hyperlipidemia) ,contact with jaundiced patient.
Drug Hx: → Antibiotics, NSAID, Laxatives
Family Hx: Ask about relevant conditions related to the history (Gastric cancer, PUD ... etc.), and any chronic diseases.
Social Hx: Smoking history (# of pack years), alcohol, travel history

(DDx: Gastroenteritis, Bacillary dysentery or Ameba, IBD, Colon CA, PUD, IBS, Celiac disease)

Investigations:

1. Stool Culture → Infectious Colitis
2. Endoscope → Colon CA, IBD, Celiac disease.

Hematuria

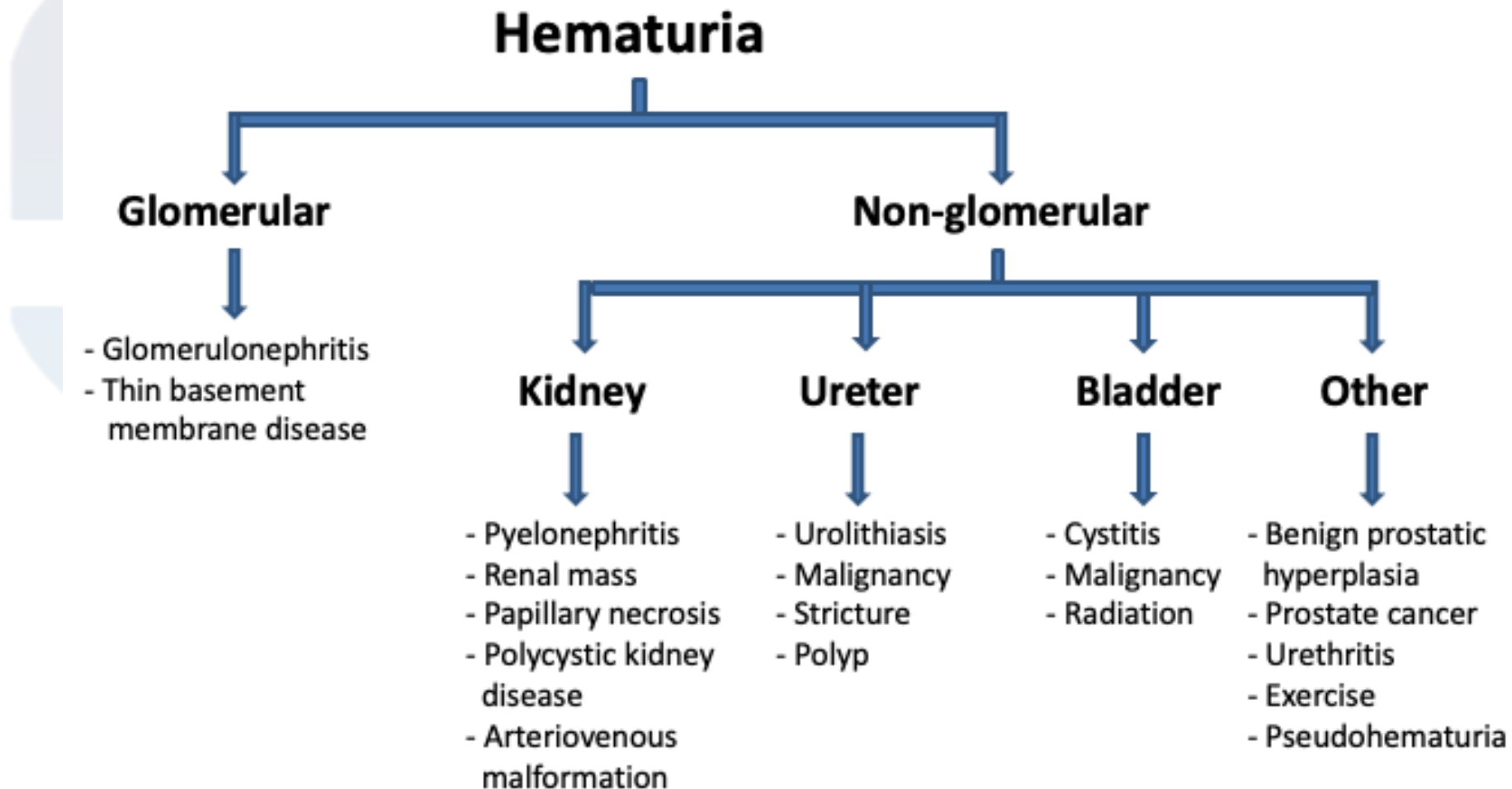
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Hematuria

- The presence of the RBC'S in the urine >5.
- Can be classified according to **quantity, occurrence during voiding, and origin of bleeding.**
- **Microhematuria** (GN/ UTI/BPH/ Urolithiasis/ Menstruation/ malignanacies) Vs **Macrohematuria** (Non-glomerular).
- **Glomerular VS non-glomerular.**
- **Initial hematuria:** Occur at the beginning and end by the end, typically suggests ureteral damage.
- **Terminal hematuria:** During the last of micturition, suggest the damage to the bladder neck, prostate, or trigonal area (BPH, Prostatitis).
- **Total hematuria:** Kidney cause (Urolithiasis/ UTI/ Polycystic kidney disease).

Hematuria



Hematuria

Table 1. **Glomerular Versus Extraglomerular Hematuria**

Factor	Glomerular	Extraglomerular
Color	Smoky, tea- or cola-colored, red	Red or pink
RBC Morphology	Dysmorphic	Normal
Casts	RBC, WBC	None
Clots	Absent	Present (+/-)
Proteinuria	$\geq 2+$	$< 2+$
RBC=red blood cell, WBC=white blood cell		

Painful VS Painless

Painful hematuria	Painless hematuria
Stones (MCC), UTI'S, Trauma, Prostatitis	Local causes: Tumors (most important is bladder ca, RCC, prostatic ca), GNs. Note bladder cancer patient mainly complaining of painless gross intermittent hematuria.
You have to be sure if it's a hematuria or changed urine color like a patient uses 1- Rifampicin 2- NSAIDS 3- Flagyl (metronidazole). 4. Foods.	Systemic causes: SLE, Paget's, anticoagulant, warfarin toxicity.

Investigations

- **Lab:**
 - (CBC), UA, Urine culture, KFT, Cytology, PSA.
- **Imaging:** US, KUB, CT.

Treatment

- **Bladder cancer:** **Non invasive** : TURBT, BSG.
Invasive: male (cystoprostatectomy)
female (Anterior pelvic exenteration).
- **Renal cancer:** complete or partial nephrectomy + Immunotherapy for metastasis (VEGF Inhibitors).
- **UTI** : antibiotics (ciprofloxacin).

Treatment (Renal stones)

- First with analgesia and fluid resuscitation

- 1) **if <0.5 cm + Distal part of UT** --> Conservative -> more hydration + drugs to dilate ureter and urethra (**alpha 1 blockers**).
- 2) **0.5cm < stone < 2cm proximal** --> ESWL تفتيت
Distal ---> flexible uretroscope ,If not working --- > PCNL.
- 3) **Radiolucent (Uric acid) or Large Stones** --> PCNL, if not working ----> **open surgery** (not common).

History

- Introduces self , takes permission and brief patient profile.
- HOPI :
 1. **Color.**
 2. **Onset.**
 3. **Duration.**
 4. **When in the stream.**
 5. **Colicky pain (Painful VS painless).**
 6. **Odor.**
 7. **Amount.**
 8. **Clots.**
 9. **Is it first time?**

Associated symptoms: 2 marks each (**Constitutional**/ **UTI**/ LUTS+ Stones/**Urethritis**)

- **Weight loss, Appetite.**
- Adequate fluid intake.
- **Fever, Chills, Rigor.**
- **Flank pain >>> SOCRATES.**
- **Fatigue.**
- **Nausea, Vomiting.**
- **Frequency.**
- **Urgency.**
- Incontinence.
- **Nocturia.**
- **Dysuria.**
- Hesitancy.
- Poor stream.
- Intermittency.
- Incomplete voiding
- Urine color.
- Urine odor.
- Back / pelvic pain.
- **Sexual activity normal**

- **Medication:** Rifampin, NSAID, Warfarin, Aspirin, Heparin

- **Type of food:** beetroot ,black berry, food coloring

- **Systematic Review:**

1. CVS

2. RS

3. MSS

4. CNS

5. ES

6. GIT.

- **Past Medical History:** ½ mark each /6.5

1. History of **UTI**
2. Previous episode
3. **Trauma**
4. **Previous surgery** recent folly's cath insertion ?
5. **Chronic diseases** (HTN, DM).

- **Family History:** ½ mark each /3

Stone, Cancers (Bladder/ Kidney), similar condition.

- **Social History:** 1 mark each /3

Smoking , Alcohol use, recent travel, menstrual cycle in women.

- **Patient concerns, ideas, what suspected to do.**

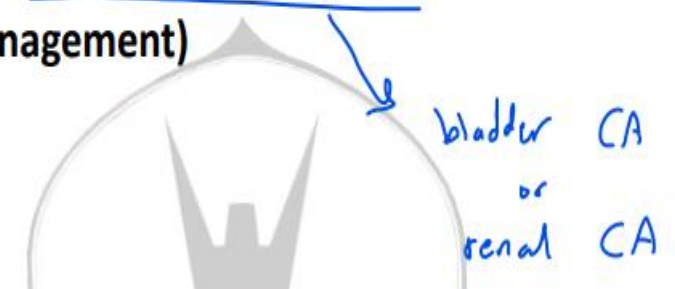
Kidney stone

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ES GIT	
Past Medical History: ½ mark each	/6.5
1. History of UTI no 2. Previous episode no 3. Trauma no 4. Previous surgery recent foly's cath insertion ? 5. Chronic diseases (HTN, DM) yes	
Family History: ½ mark each	/3
Stone no Cancers no	
Social History: 1 mark each	/3
Smoking - yes Alcohol use no	

What is your DDX ?

If Renal stone was the most likely diagnosis; how would you treat this patient? (Lines of management)



**During Hx taking don't forget to ask about I.C.E : Idea , Concern , Expectation >> the examiner will be glade to here that ! ☺

** IN case of female pt. >> ask about current menstrual cycle .

** Painless hematuria >>don't forget bladder Ca.

Bladder Cancer

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Past Medical History: ½ mark each	/6.5
1. History of UTI no 2. Previous episode no 3. Trauma no 4. Previous surgery no 5. Chronic diseases (HTN, DM) yes	
Family History: ½ mark each	/3
Stone no UTI no Cancers yes	
Social History: 1 mark each	/3
Smoking - yes Alcohol use no	

What is your DDX ?

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What is the most common cause of bladder cancer ?

Thank You

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(Flank/ Suprapubic) Pain

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UTI

- It is a very common urinary tract problem, more common in **females (shorter 5cm and wider urethra)**.
- The etiology explained by: **Ascending infection**, instrumentation, coitus in females, Hematogenous.
- The most common microorganism **is: E.Coli (90%) / Proteus / Klebsiella / SA**.
- Predisposing factors: **Stones, obstruction, reflux, DM, pregnancy, indwelling catheter/ stent**.
- Clinical picture:
 1. **Lower UTI**: Frequency, urgency, dysuria, nocturia, **suprapubic pain, hematuria**.
 2. **Upper UTI** (Pyelonephritis): Back/ flank pain, **fever, chills, rigors, nausea, vomiting, hematuria, costovertebral angle tenderness**.

UTI

- **Diagnosis:**

1. **Cystitis:** made by clinical picture + urinalysis (>10 WBC'S/ HPF $> 10^5$ CFU).
2. **Pyelonephritis:** clinical picture + CBC + KFT + U.A + Urine culture.

- **Complications of pyelonephritis:**

1. Renal / perinephric abscess.
2. Recurrent infections (chronic pyelonephritis).
3. Sepsis.

UTI types

- **Complicated VS. Uncomplicated.**
- **Uncomplicated:** Infection in healthy patient with **structurally and functionally normal** urinary tract.
- **Complicated:** **abnormal** structure or function, and **may have factors** that increase the risk to acquire an infection and decrease the efficacy of management.
- **Factors that suggest complicated UTI:**
 1. Male gender.
 2. Pregnancy.
 3. Elderly patient.
 4. DM.
 5. Immune suppression.
 6. Childhood UTI.
 7. Recent ABX use.
 8. Indwelling catheter.
 9. Hospital acquired infections.
 10. Symptoms for more than 10 Days.

Treatment:

- **Lower:**

1. Uncomplicated: 3 days of antibiotics orally in women (TMP-SMX/ Nitrofurantin 5 days and Single dose Fosfomycin), in men 7 days therapy.

2. Complicated: 10-14 days either oral ciprofloxacin or IV.

- **Upper:** 7 days of antibiotics ciprofloxacin orally or give IM 1g Ceftriaxone followed by oral for 7 days.

Indication of hospitalization

- In **uncomplicated**: High fever, high WBCS, vomiting, dehydration, evidence of sepsis.
- In **complicated pyelonephritis**.
- **Failure to improve on ABX initially** so you should admit and do CT-Scan (obstruction/ complications).

History

- Introduces self , takes permission and brief patient profile.
- HOPI : SOCRATES

1. Site.
2. Onset.
3. Character.
4. Radiation.
5. Exacerbating factors.
6. Relieving factors.
7. Severity.

Associated symptoms: 2 marks each (**Constitutional**/ **UTI**/ LUTS+ Stones/
Urethritis)

- **Fever, Chills, Rigor**
- **Weight change, Appetite.**
- **Fatigue.**
- **Nausea, Vomiting.**
- **Frequency.**
- **Urgency.**
- **Incontinence.**
- **Nocturia.**
- **Dysuria.**
- **Hesitancy.**
- **Poor stream.**
- **Intermittency.**
- **Incomplete voiding**
- **Urine color.**
- **Urine odor.**
- **Back / pelvic pain.**
- **Sexual activity normal**

- **Medication:** Rifampin, NSAID, Warfarin, Aspirin, Heparin

- **Type of food:** beetroot ,black berry, food coloring

- **Systematic Review:**

1. CVS

2. RS

3. MSS

4. CNS

5. ES

6. GIT -->Anorexia (appendicitis) , change in stool (Diverticulitis), with fatty food (cholecystitis).

- **Past Medical History:** ½ mark each /6.5

1. History of **UTI** 2. Previous episode 3. **Trauma** 4. **Previous surgery** recent folly's cath insertion ? 5. **Chronic diseases** (HTN, DM).

- **Family History:** ½ mark each /3

Stone, Cancers (Bladder/ Kidney), UTI.

- **Social History:** 1 mark each /3

Smoking , Alcohol use, recent travel, menstrual cycle in women.

- **Patient concerns, ideas, what suspected to do.**

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UTI

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3. Trauma 4. Previous surgery 5. Chronic diseases (HTN, DM)	
Family History: ½ mark each	/3
Stone yes UTI yes	
Social History: 1 mark each	/3
Smoking - no Alcohol use no	

What is your DDX ?

Urinary causes: 1. UTI. 2. Stone 3. Trauma. 4. Tumor.
Non-Urinary: Appendicitis, cholecystitis, bowel obstruction, muscle spasm.

Flank Pain Differential

Pathophysiology	Differential
Renal	Nephrolithiasis, urolithiasis, retroperitoneal hematoma, ruptured renal cyst, ureteral stricture
Infectious	Pyelonephritis, perinephric abscess, psoas abscess, pneumonia, discitis, vertebral osteomyelitis, epidural abscess
Vascular	Ruptured AAA, renal infarct, renal vein thrombosis, PE
GI	Biliary dz
Other	PCKD (ruptured cyst), renal malignancy, varicella-zoster
Trauma	Lumbar spasm, radiculopathy

RIGHT

- Cholelithiasis
- Biliary colic
- Acute Cholecystitis
- Acute cholangitis
- Acute hepatitis
- Liver abscess
- Budd-Chiari syndrome
- Portal vein thrombosis
- Pancreatitis
- Duodenal ulcer
- Nephrolithiasis

- Acute myocardial infarction
- Acute pancreatitis
- Chronic pancreatitis
- Peptic ulcer disease
- GERD
- Gastritis
- Functional dyspepsia
- Gastroparesis

LEFT

- Splenomegaly
- Splenic infarct
- Peptic ulcer
- Gastritis
- Nephrolithiasis

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- Nephrolithiasis
- Pyelonephritis
- Constipation
- Infectious colitis
- Ischemic colitis

- Appendicitis
- Constipation
- Small bowel obstruction
- Large bowel obstruction
- Inflammatory bowel disease
- Irritable bowel syndrome
- Gastroenteritis
- Ischemic colitis
- Abdominal aortic aneurysm

- Nephrolithiasis
- Pyelonephritis
- Constipation
- Infectious colitis
- Ischemic colitis

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- Appendicitis
- Nephrolithiasis
- Pyelonephritis
- Infectious colitis
- Inflammatory bowel disease
- Inguinal hernia
- Ovarian cyst / torsion
- Ectopic pregnancy (unilateral)
- PID (bilateral)

- Cystitis (UTI)
- Acute urinary retention
- Appendicitis
- Inflammatory bowel disease
- Ovarian cyst
- **Ureteric stone.**
- **Urinary retention.**
- **Bladder rupture.**

- Diverticulosis / Diverticulitis
- Nephrolithiasis
- Pyelonephritis
- Irritable bowel syndrome
- Infectious colitis
- Inguinal hernia
- Ovarian cyst / torsion
- Ectopic pregnancy (unilateral)
- PID (bilateral)

Thank You

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Testicular Pain/ Swelling

QMA Team

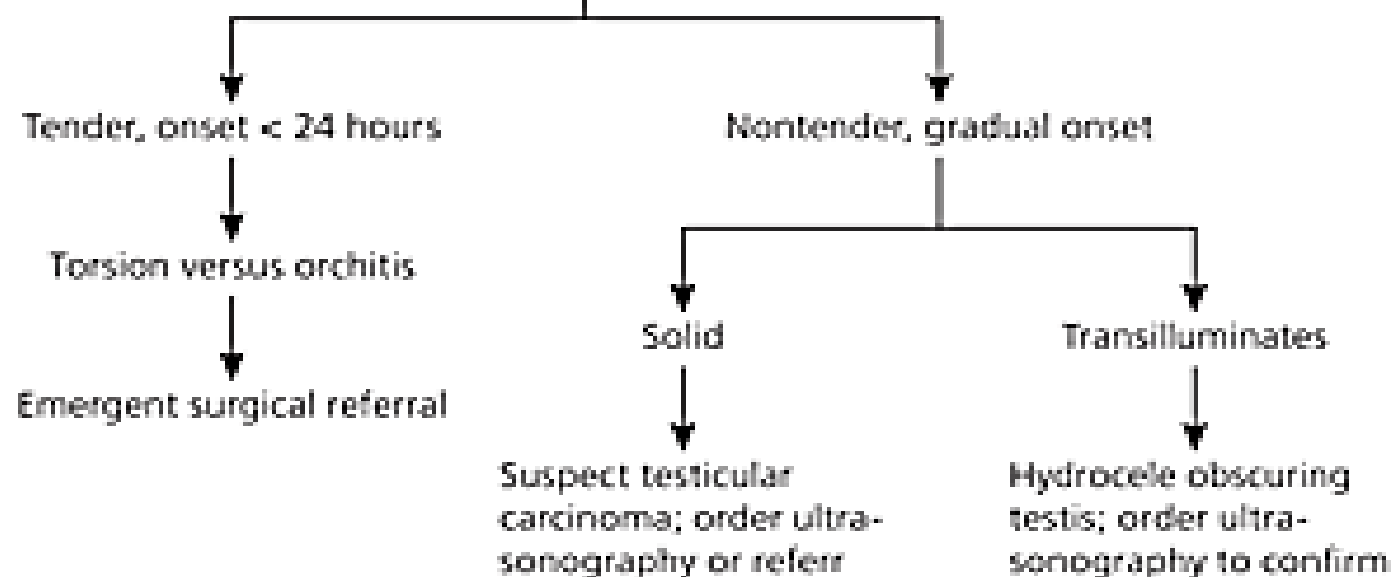
Painful scrotal conditions

1. Torsion of the testis.
2. Torsion of the **appendage**: Pain in the **upper pole of the testis, not diffuse, gradually starts**, with **no systemic symptoms**, on PE **Blue dot sign**, the treatment **conservative** (pain killers, ice and scrotal support).
3. Epididymitis.
4. Orchitis.
5. Trauma.

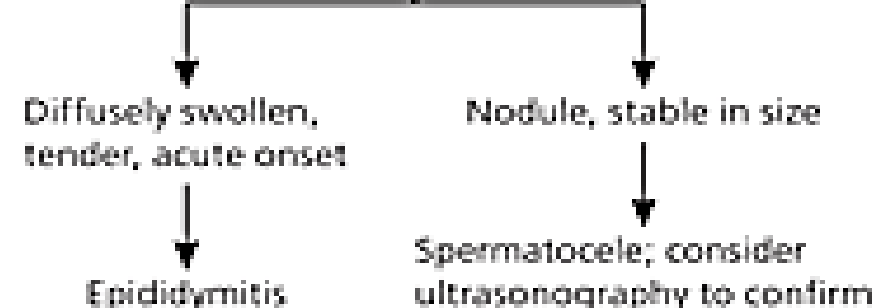
Painless swelling

- Testicular cancer.
- Hydrocele.
- **Varicocele**: Abnormal dilation of pampiniform plexus, either **painful/** **painless** (infertility), can occur more in the **left side**, gradual in onset, **bag-warm like mass**, associated with **pain** that **decrease with support**. On PE **Valsva/ cough/ stand can increase the mass**. Lab: Do seminal fluid analysis to assess the infertility. Managed by: **Varicocelectomy**.
- Hematocele.

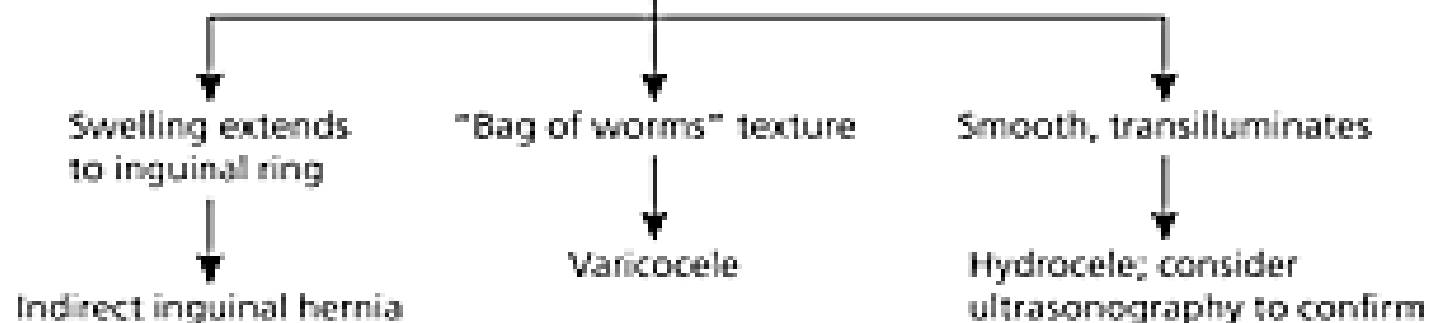
Swelling of the testis



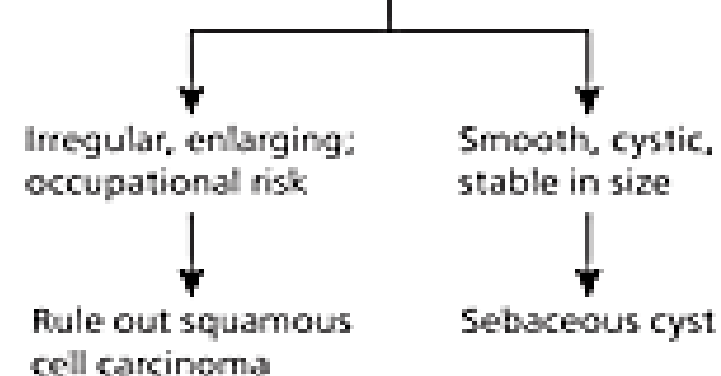
Swelling of the epididymis



Swelling of the spermatic cord

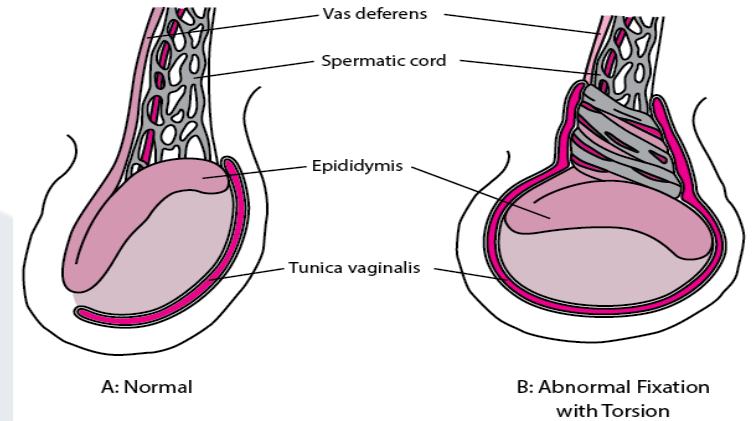


Swelling of the skin



NOTE: Emergent surgical referral should be strongly considered for any acutely painful scrotum when testicular torsion is a possibility. If testicular torsion is not suspected, ultrasonography may be performed to confirm the diagnosis.

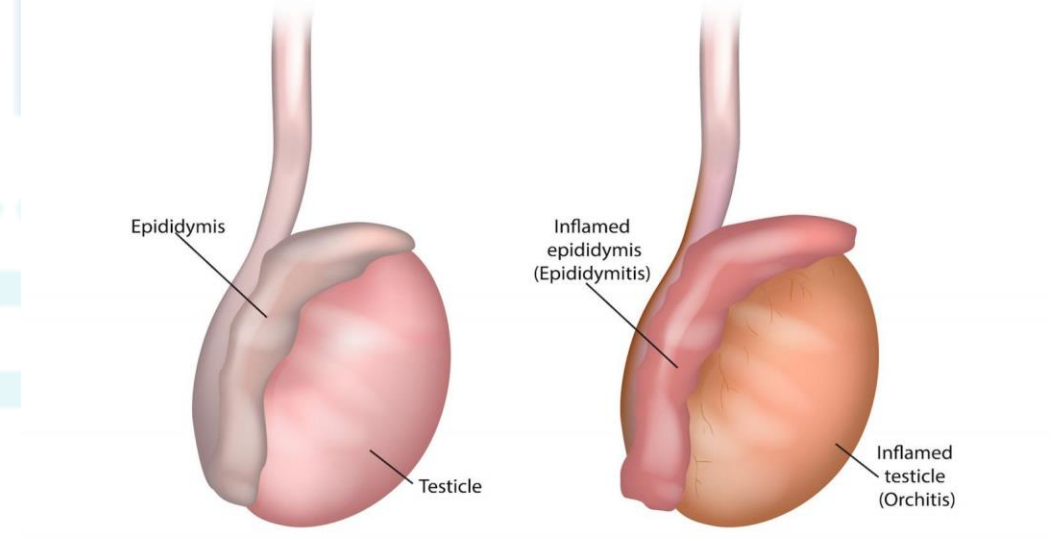
Testicular torsion



- **Most common cause of testicular pain.**
- Torsion will lead to decrease the blood supply and **ischemia**.
- **Acute** condition.
- Golden time: **6 hours (viable testis), if >24hr (<10% salvage).**
- Age: **10-20** years typical age of torsion, but may occur at any age.
- Associated symptoms: **Vomiting, severe diffuse pain, not relieved by elevation of testis, the testicle may be horizontal and high.**
- Diagnosed by: **Surgical exploration, U/S (Solid mass), Doppler.**
- Treatment: **Surgical exploration, detorsion, orchidopexy all.**

Epididymo-orchitis

- Subacute **inflammatory** condition, **more gradual**.
- Associated with **fever**.
- Caused by 1. **STI**. 2. **Gonorrhea** (MCC). 3. **E.coli** (Middle east).
- DX: UA, Culture, Swab for STD, US+-Doppler
- Treatment:
 1. **IV/ Oral antibiotics.**
 2. **Analgesic.**
 3. **Support.**



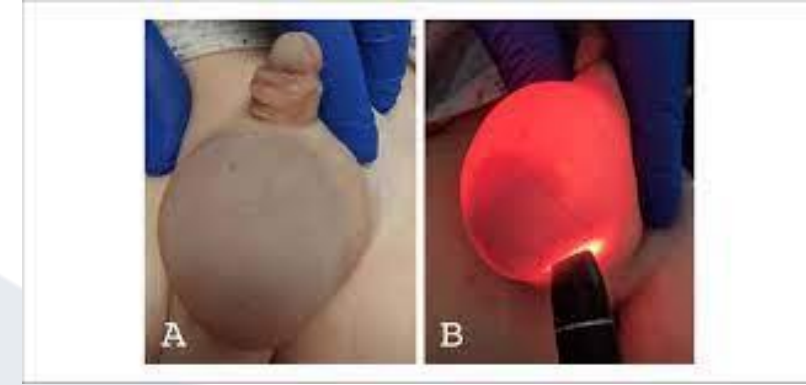
* Differences between Testicular torsion and Epididymo orchitis :

	Testicular torsion	Epididymo Orchitis
Onset	Acute	Subacute
Doppler US	Decreased / Absent blood supply	Increased blood supply
Age	10-20 year (most common)	Rarely between 10-20 years.
Management	mentioned above	mentioned above
physical Exam	<ul style="list-style-type: none"> - Redness, swelling, hotness - Negative prehn's sign - Absent Cremasteric reflex 	<ul style="list-style-type: none"> - Redness, swelling, hotness - Positive prehn's sign - normal Cremasteric reflex

* **prehn's sign** : when you elevate the scrotum, the pain will relieve (↓ pain, ↓ edema)

* **Cremasteric reflex** : stroking / scratching the upper medial thigh, so the scrotum will be contracted

Hydrocele



- The accumulation of fluid in the processes vaginalis membrane.
- Usually **unilateral**.
- Types: **Isolated hydrocele**, **communicating hydrocele**.
- How to differentiate? (**supine** position = Disappear (communicating)).
- It starts **gradually** and **transillumination** test positive.
- It can be associated with inguinal hernia (vomiting/ pain).
- The management is **hydrocelectomy**.



History

- Introduces self , takes permission and brief patient profile.
- HOPI : SOCRATES
 1. Site (Right/ left .. Unilateral/bilateral ... localized/diffused) .
 2. Onset.
 3. Character (nature of pain/ if swelling redness .. Hotness .. Reducible .. Bag of warms).
 4. Radiation.
 5. Exacerbating factors (Standing/ lying/ day VS night/ cough).
 6. Time (continuous/ intermittent/ previous episodes).
 7. Relieving factors (Elevation/ pain killers).
 8. Severity.

Associated symptoms: 2 marks each (**Constitutional**/ LUTS+ Stones/**Urethritis**)

- **Fever, Chills, Rigor**
- **Weight change, Appetite.**
- **Fatigue.**
- **Nausea, Vomiting.**
- **Frequency.**
- **Urgency.**
- **Incontinence.**
- **Nocturia.**
- **Dysuria.**
- **Hesitancy.**
- **Poor stream.**
- **Intermittency.**
- **Incomplete voiding**
- **Urine color.**
- **Urine odor.**
- **Back / pelvic pain.**
- **Sexual activity normal**

- **Medication:** Rifampin, NSAID, Warfarin, Aspirin, Heparin

- **Type of food:** beetroot ,black berry, food coloring

- **Systematic Review:**

1. CVS

2. RS

3. MSS

4. CNS

5. ES

6. GIT --> constipation.

- **Past Medical History:** ½ mark each /6.5

1. History of **UTI**
2. Previous episode
3. **Trauma**
4. **Previous surgery** recent folly's cath insertion ?
5. **Crptochidism**.
6. **Chronic diseases** (HTN, DM).

- **Family History:** ½ mark each /3

Stone, Cancers (Bladder/ Kidney), UTI.

- **Social History:** 1 mark each /3

Smoking , Alcohol use, recent travel, menstrual cycle in women.

- **Patient concerns, ideas, what suspected to do.**

Thank You

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