

## GI focused

### Inspection:

#### **Foot of the bed:**

- A. **Movement:** Normal bilateral symmetrical abdominal movement with breathing.
- B. **Pattern:** Abdominothoracic (Male)
- C. **Contour:** Flat and slightly scaphoid
- D. **Umbilicus:** Centralized and inverted
- E. **Abdominal swelling**

**Commented [ZWAM1]:** In generalized peritonitis, the abdomen will not move with breathing. The breathing will become thoracic instead of diaphragmatic. Board like rigidity sign (held rigid abdominal muscles).

**Commented [ZWAM2]:** In umbilical hernia: Distended and everted  
In ascites: Flat or everted  
In obesity: Sunken

#### **Right to the patient:**

- A. **5S** (scars, skin lesions, stria, stoma, scratch)
- B. **4V** (visible veins, visible masses, visible pulses, visible peristalsis)
- C. **2** (bruises, hair distribution)

**Commented [ZWAM3]:** 1.Diffused (ascites, obstruction)  
2.Localized (urinary retention, mass, enlarged organ)

**Commented [ZWAM4]:** Infraumbilical: Laparoscopy

**Commented [ZWAM5]:** 3.Seborrheic warts (normal in older patients)  
4.Hemangioma (Campbell de Morgan spots) (normal in Children)

**Commented [ZWAM6]:** 5.Portal hypertension (Caput medusa, vein radiation from the umbilicus, umbilicus is distended and bluish)  
6. IVC obstruction (dilated tortuous collateral upward veins)  
7.SVC obstruction (dilated tortuous collateral inward veins)

#### **Maneuvers:**

- A. **Cough** (No visible cough pulses, No hernia, No Dumphy's sign "Appendicitis")
- B. **Tilting head** (Divarication of rectus abdominus)

**Commented [ZWAM7]:** 1.Cullen's Sign (around umbilicus)  
2. Grey Turner's Sign (flanks)  
Both seen in hemorrhagic pancreatitis, aortic rupture, ruptured ectopic pregnancy.

## **Palpation**

*Firstly: Take permission, eye to eye contact, warming hand and hygiene.*

*Sit on chair please*

### **A. Superficial palpation:**

*9 areas starting from Right Iliac Fossa*

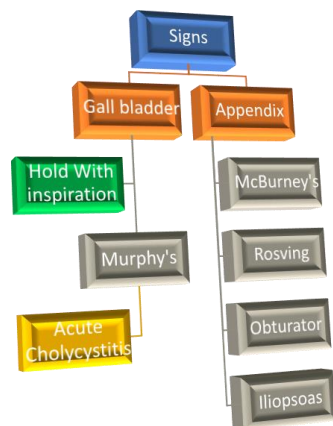
- 1. Soft lax skin (no rigidity, no guarding)*
- 2. No superficial masses*
- 3. No superficial tenderness*

### **B. Deep palpation:**

*9 areas starting from Right Iliac Fossa*

- 1. No Deep masses*
- 2. No Deep tenderness*
- 3. No rebound tenderness*

### **C. Signs:**



**General notes for palpation:**

**Anxiety**

*Pain with superficial palpation:*

1. Generalized peritonitis
2. Anxiety

*Pain with superficial palpation that is absent with deep palpation = anxiety.*

*Try to distract the patient with palpation.*

**Site of tenderness:**

1. Epigastrium = peptic ulcer
2. RUQ = Cholecystitis
3. RLQ = Appendicitis or Crohn's
4. LLQ = Diverticulitis

**Masking the findings:**

*Findings can be masked in patients using glucocorticoids, anti-inflammatory drugs, opioids, immunosuppressants, alcohol intoxication or low level of consciousness.*

**Palpable masses:** *If there is any mass, use SPACESPIT.*

*Upper abdomen: Normal aortic pulsation/ aortic aneurysm/ Gastric or pancreatic mass.*

*If you find palpable mass in LLQ, you can differentiate if it is normal or not after defecation. If it disappears after defecation, it is just feces. If not, it is a hallmark.*

*Subcutaneous nodule at the umbilicus = Sister Mary Joseph's nodule (metastatic cancer).*

## Organs

### **Liver**

<b>Palpation</b>	<b>Percussion</b>
For lower edge of the liver: Start from RLQ (Hold with <b>inspiration</b> ) moving 1 cm with each breath till reaching the costal margin.	For lower edge of the liver: Start from RLQ (Hold with <b>inspiration</b> ) moving 1 cm with each breath till reaching the costal margin. The sound will be tympanic till dullness (lower edge).
Normally: Non palpable, non-tenderness, no hepatomegaly.	For upper edge of the liver: Start from right 2 <sup>nd</sup> intercostal space (resonance) till 5 <sup>th</sup> (dullness) with <b>holding with expiration</b> . The sound will be resonant till dullness (upper edge)
	Measure liver span (from lower to upper edge). Normally = 8-12cm = no hepatomegaly

### **Notes for liver:**

**Resonance below 5<sup>th</sup> intercostal space:**

1. Hyperinflated lungs
2. Chilaiditi's sign (right colic flexure between diaphragm and liver)

**Pulsatile Liver:**

1. Tricuspid regurgitation
2. Right heart failure.

**Bruits over the liver:**

1. Heart murmurs
2. AV malformation
3. Portosystemic shunt

4. Alcoholic hepatitis
5. Hepatocellular cancer

Hepatomegaly:

6.11 box

Right heart failure > congested liver > Soft and tender

Dullness in the epigastrium or LUQ = Left lobe enlargement.

### **Spleen**

<b>Palpation</b>	<b>Percussion</b>
It enlarges diagonally from LUQ to Umbilicus	Behind the mid-axillary line, 9 <sup>th</sup> , 10 <sup>th</sup> , 11 <sup>th</sup> intercostal space
Move your hands diagonally from umbilicus till left costal margin (holds with inspiration) and move 1cm with each breath	Normally: Dullness
Ask the patient to roll towards you and palpate again	
Normally: Not palpable, no tenderness, no splenomegaly	

### **Spleen notes:**

For spleen to become palpable, it should enlarge 3 folds.

Causes of splenomegaly: 6.14 table

How to differentiate palpable spleen from kidney: 6.13 table

### **Ascites**

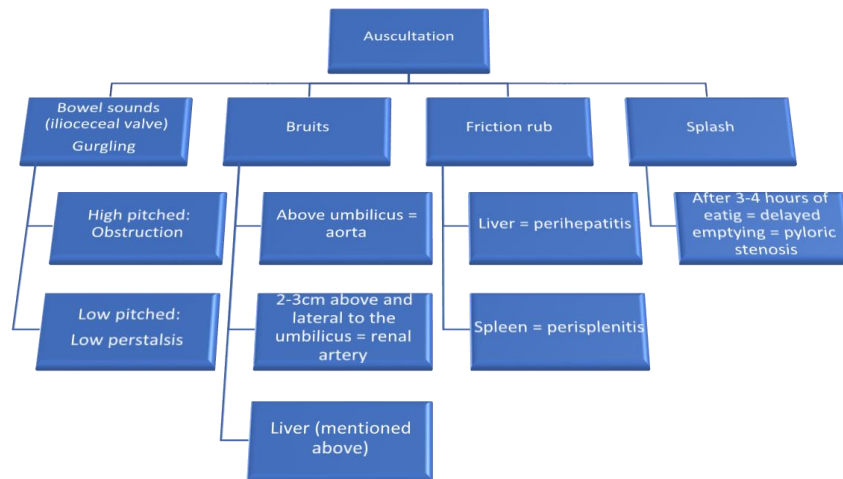
<b>Shifting dullness</b>	<b>Fluid thrill</b>
<i>For mild – moderate ascites</i>	<i>For severe (massive) ascites</i>
<i>Percuss from the midline till the edges (flanks) and differentiate the tympanic (at the midline) from the dullness (at the flanks)</i>	<i>Ask the patient to put his hand on the midline of the abdomen (to prevent the thrill from transmitting into the skin)</i>
<i>Ask the patient to rotate into other side and wait for 10 minutes till the fluid moves to the left and keep your finger on the flank</i>	<i>Put your left hand against the left side of the abdomen and flick a finger of your right hand on the right side of the abdomen</i>
<i>Percuss again on the flank: A. Tympanic: mild-moderate ascites B. Dullness: Severe ascites</i>	<i>If there is a thrill = massive ascites</i>

#### **Ascites notes:**

*Causes of ascites: 6.15 table*

*SAAG: table on e-learning*

### **Auscultation:**



### **Mention:**

*I want to check:*

1. JVP, Pulmonary edema, pleural effusion
2. Heart sounds
3. Hernia (inguinal and femoral)
4. Lymph nodes (inguinal and femoral)
5. Testicular atrophy, rectal examination
6. Lower limb edema, sacral edema
7. Erythema nodosum, pyoderma gangrenosum

**Check all figures and tables in the textbook please**

**Check SAAG concept and Courvoisier's sign please**