

GASTRO-INTESTINAL-TRACT SYSTEM (GIT)

The Possible Short Cases in Clinic Exam are:

- 1- Jaundice.
- 2- Ascites.
- 3- Hepatomegaly.
- 4- Splenomegaly.
- 5- Hepato-Splenomegaly.

Abdominal Examination Means → Examination Locally Only For the Abdomen.

GIT Examination Means → Abdominal Examination & General Examination Related to GIT System.

ABDOMINAL EXAMINATION:

IN ABDOMINAL EXAMINATION; THE PATIENT HAS TO BE LYING FLAT (SUPINE POSITION) AND THE HANDS SHOULD LIE BY HIS SIDES.

THE EXPOSURE → FROM XIPHOID PROCESS TO SUYPHYSIS PUBIS.

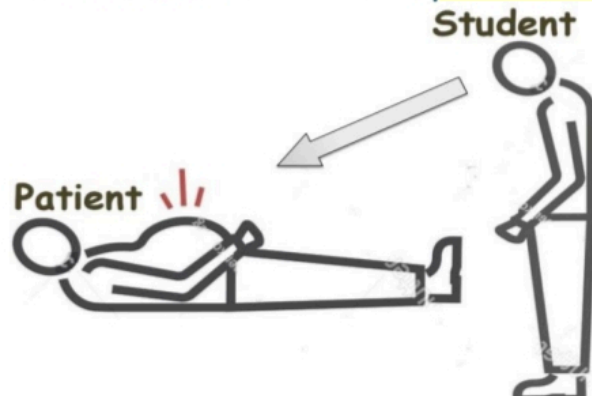
INTRODUCE YOUR SELF,, STAND ON THE RIGHT SIDE OF THE PATIENT & TAKE PERMISSION FROM THE PATIENT FOR EXAMINATION & EXPOSURE.

السلام عليكم .. صباح الخير يا حاج .. أني (فلان فلان) طالب سنة خامسة في كلية الطب البشري ..
من بعد إذنك يا حاج نبي اندير كشف على بطنك .. لو سمحت يا حاج ومن بعد إذنك لو تقدر تفتح السوربة
وسامحني كثرت عليك ...

1 ❖ INSPECTION

1- Abdominal Distention & Symmetry:

Stand at the End of the Bed & Look at the Abdomen For Any Distension,
If There is Distention; Look If It is Symmetrical Or Not.



Differential Diagnosis of Abdominal Distention (6 F):

*Fat, *Fluid (Ascites), *Feces, *Flatus, *Fetus, *Full Bladder.

Abdominal Distention Could Be:	
Generalized Distention:	Localized Distention:
Seen In: 1. Ascites. 2. Obesity.	Seen In: 1. Hepatomegaly. 2. Constipation.

2- Abdominal Movement During Respiration:

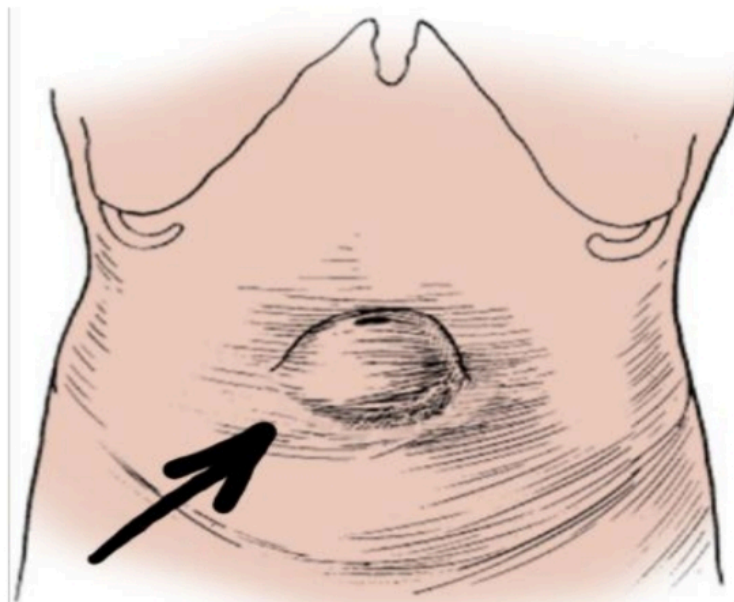
Stand at the Right Side of the Patient and Look at the Abdominal Movement (Up & Down) and Make Sure If the Abdomen Moves with Respiration Or Not.

Abdomen Not Move with Respiration in → Generalized Peritonitis & Paralytic Ileus.

3- Umbilicus:

Normally → Inverted.

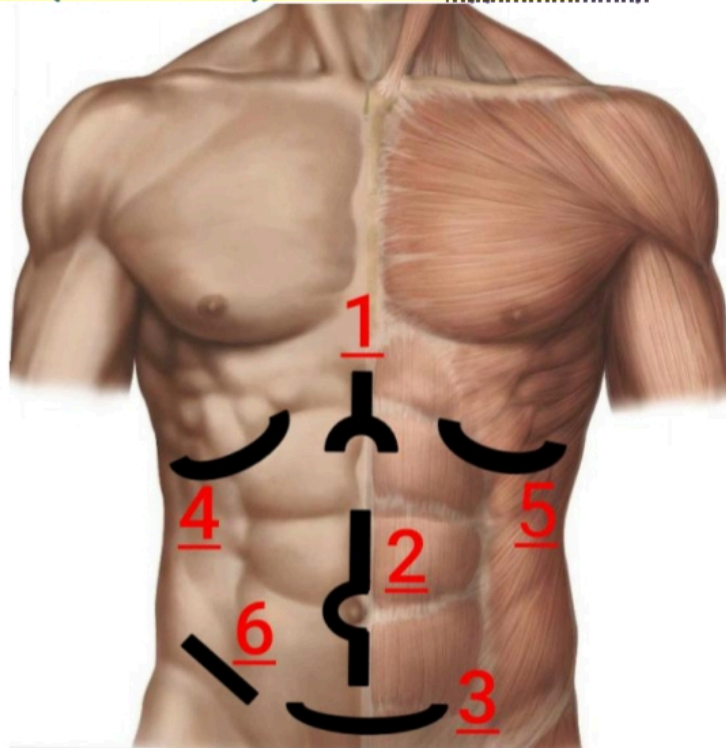
But; Could Be Everted as In → Ascites.



4- Scars:

Look at The Abdomen and See if There is Any Scar & Which Site;

- (1). Mercedes Scar: Indicate → Liver Surgery (Liver Transplant).
- (2). Midline Scar: Indicate → Laprotomy.
- (3). Supra-Pubic Scar (Pfannenstiel Scar): Indicate → Caesarian Section.
- (4). Right Sub-Costal Scar (Kocher Scar): Indicate → Cholecystectomy.
- (5). Left Sub-Costal Scar: Indicate → Splenectomy.
- (6). Right Iliac Fossa Scar (Gridiron Scar): Indicate → Appendectomy.



5- Scratch Mark:

Due to → Pruritis In Case of → Jaundice.

6- Striae:

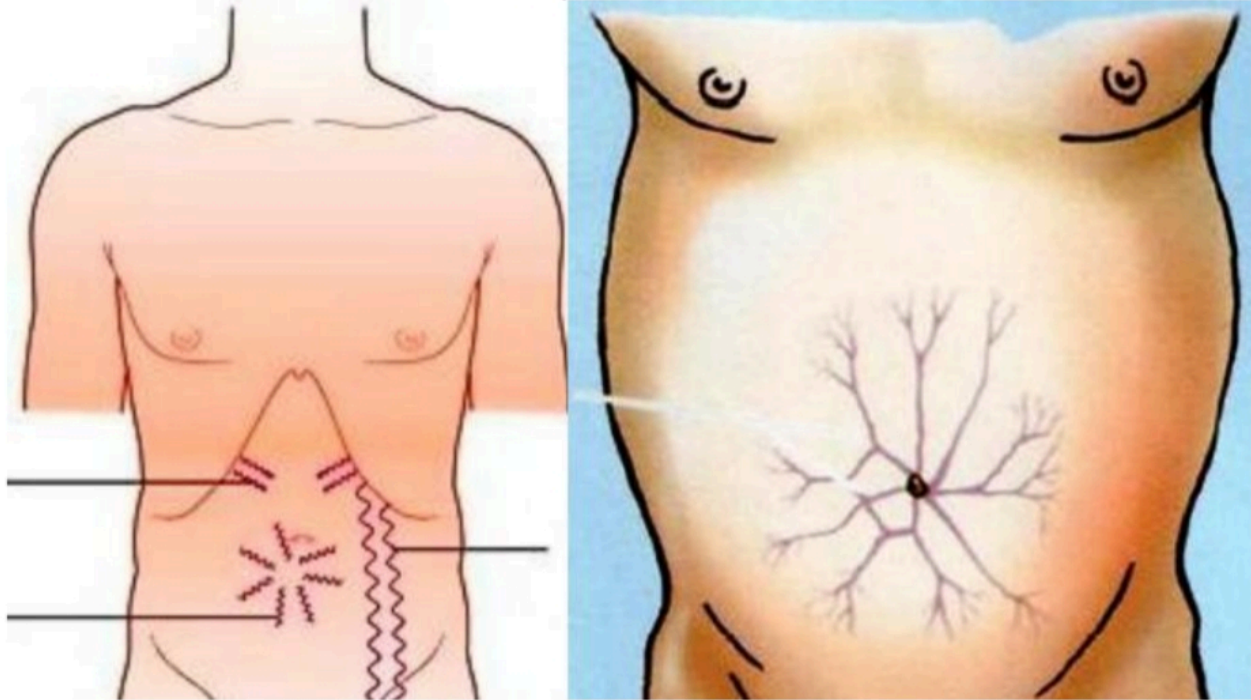
*Differential Diagnosis of Striae:

1. Ascites.
2. Cushing Syndrome.
3. Obesity.
4. Pregnancy.

7- Visible Dilated Veins:

Veins Around Umbilicus → Caput Medusa; Indicate Portal HTN.
Lateral Abdominal Veins, Indicate → IVC Obstruction.

Check Direction of Blood Flow By Milking Test → To Differentiate Between IVC Obstruction & Caput Medusa.



8- Visible Pulsation:

→ Epigastric Pulsation: Indicate Aortic Aneurysm, Tricuspid Regurgitation & Thin Patients.

9- Visible Peristaltic Movement:

Indicate → Intestinal Obstruction & Gastric Outflow Obstruction.

10- Hair Distributions:

Loss of Pubic Hair; Indicate → Liver Cirrhosis.

11- Hernia (Cough Impulse Test):

Ask the Patient to Cough, and Look at the Abdomen Especially in Epigastric Area, Umbilical Area, Para-Umbilical Area & Inguinal Area.
and Check If There is Any Positive Cough Impulse Swelling (Any Plugging During Cough).

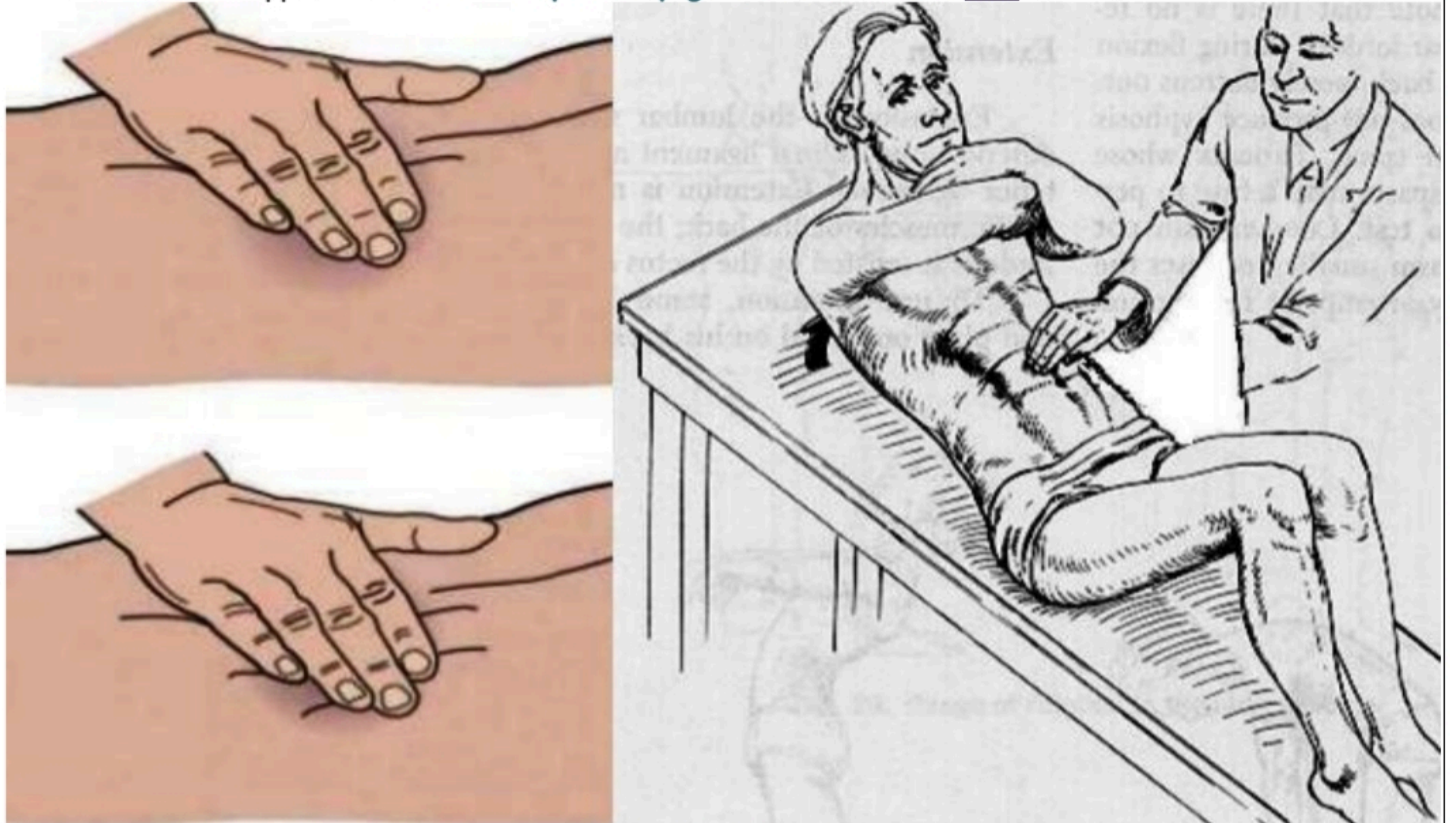
2 ❖ PALPATION

*First You Have to **Warm Your hands** & Ask the Patient If He **Has Any Pain**.

*Arms Should Be at the **Same Level of Abdominal Surface**; So → **Kneel On the Floor**
OR **Sit** On a Chair Before You Begin Palpation.

***Hand Placed Flat On Abdomen** and Use **Pads of Fingers & Palm** (**Not** Finger Tips) as in the Picture.

*The Pressure is Applied From **Metacarpo-Phalangeal Joint & Wrist**, **Not** From the Elbow Or Shoulder.



Now Start With:

1- **Superficial Palpation (3T & M):**

Ask Patient About **Site of Pain** If He **Has Pain**, and If There is; **Leave It to The Last** & Start with:

1. **Temperature:** Put Your Hand as in the Picture in **All Abdominal Areas** & Feel the Temperature.
2. **Tenderness:** Put Your Hand as in the Picture in **All Abdominal Areas** & Look at the Patient's Eyes.
3. **Tense Abdomen:** While You are Putting Your Hand On Abdomen, Check If It is **Soft OR Tense**;
 - ***Guarding:** Means → Tense Abdomen Due to **Voluntary** Muscle Contraction.
 - ***Rigidity:** Means → Tense Abdomen Due to **Involuntary** Muscle Contraction.

To Differentiate Between **Guarding & Rigidity**; Ask Patient to **Flex His Knees** and Relax, Then Take **Breathing** From Mouth;

*If the Abdomen **Changed From Tense to Lax Abdomen**; → It is **Guarding**,

*If the Abdomen **Still Tense Abdomen**; → It is **Rigidity**.

4. **Mass:** While You are Putting Your Hand On Abdomen, Check If There is Any **Superficial Mass**.

If There is Any **Mass**; You Have to Comment On:

Site, Size, Shape, Surface, Consistency, Tenderness, Fixed OR Mobile, Pulsatile OR Not Pulsatile.

Note:

If the Mass Associated with Pulsation (**Pulsatile**):

Put Your **Index & Middle Finger Above** The Mass to Check If It is;

***Transmitted Pulsation** → Up & Down Pulse,

***Expansile Pulsation** → Pulse is Within the Mass (**Aneurysm**)

Differential Diagnosis of **Abdominal Mass** According to Site:

<p>Right Hypochondrium:</p> <p>Cancer Liver. Cancer Gall Bladder. Hepatomegaly.</p>	<p>Epigastric Area:</p> <p>Cancer Stomach. Pancreatic Pseudo-Cyst. Aortic Aneurysm.</p>	<p>Left Hypochondrium:</p> <p>Cancer Pancreas. Splénomegaly.</p>
<p>Right Iliac Fossa:</p> <p>Cancer Ceacum. Appendicular Abscess. Ilio-Ceacal Crhons. Ilio-Ceacal TB. Lymphadenopathy. Transplanted Kidney.</p>	<p>Left Iliac Fossa:</p> <p>Cancer Colon. Constipation. Diverticulosis. Lymphadenopathy. Transplanted Kidney.</p>	
<p>Right Lumbar Area:</p> <p>Renal Carcinoma. Hydronephrosis. Renal Cyst.</p>	<p>Supra-Pubic Area:</p> <p>Ovarian Cyst. Uterus Mass. Urinary Bladder Mass.</p>	<p>Left Lumbar Area:</p> <p>Renal Carcinoma. Hydronephrosis. Renal Cyst.</p>

Note:

To Differentiate Between **Superficial & Deep Mass**; Ask Patient to Flex His Neck To **Contract Abdominal Muscles**;

*If the Mass **Still Palpable**; → It is **Superficial Mass**,

*If the Mass **Disappear OR Less Prominent**; → It is **Deep Mass**.

2- Deep Palpation (For → Liver, Spleen, Kidneys):

1. Liver

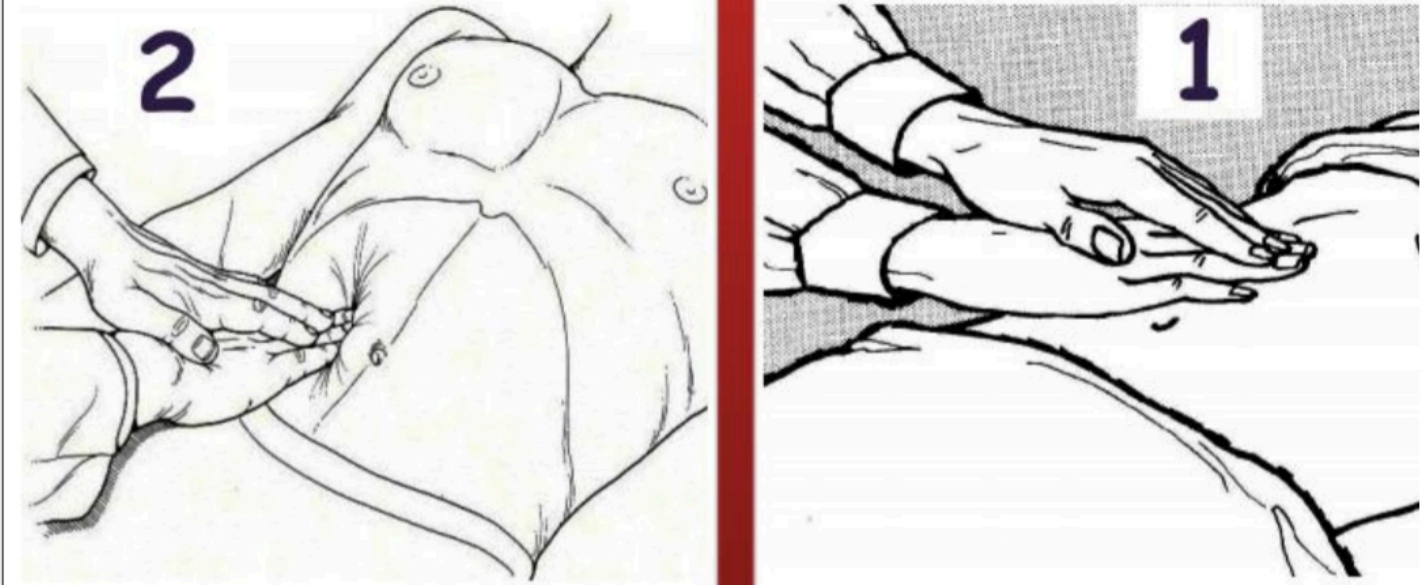
Liver Palpation:

1. > Right Hand Placed in Right Iliac Fossa.
2. > Ask the Patient to Take Slow Deep Breathing From His Mouth.
3. > Palpate Deeply in Upward Direction By Radial Border of Index Finger Parallel to Costal Margin (OR Palpate By Tip of the Fingers), Until Reach Costal Cartilage Along Mid Clavicular Line.
4. > When the Patient Do Expiration; → Pressure Applied By Your Hand, and When the Patient Do Inspiration; → You Will Feel The Liver Coming to Your Hand, (Because During Inspiration Diaphragm Descends and Push the Liver Down).
5. > Normally Liver Not Palpable (May Liver Palpable But Only Just 2cm Below Costal Margin), But If It Was Palpable; You Have to Differentiate Between Hepatomegaly and Pushed Liver, (Pushed Liver Means → Liver Pushed Down Due to Hyper inflated Chest as in COPD).



In Case of **Huge Ascites** Do **Dipping Maneuver** to Palpate Liver:

The **Fingertips** of Both Hands are **Sudden Pushed** into the Abdomen By **Flexion Movement** of **Wrist Joint**, This **Displacing** the **Fluid** and Causing the Enlarged Organ to **Rebound** Against the Fingertips.



Note:

Hepatomegaly and **Pushed Liver** Differentiate by **Measuring Liver Span**.

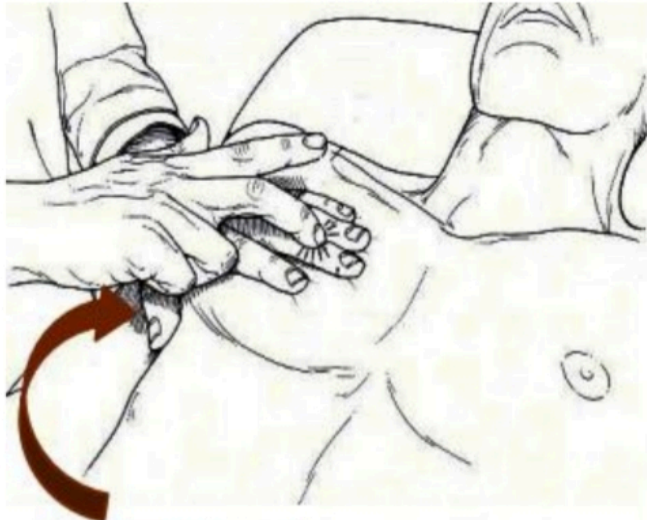
Liver Span:

Normal Liver Span → **8 - 12 cm.**

Liver Span Help To Differentiate Between **Hepatomegaly & Pushed Liver**

1. > Do **Percussion** On the Abdomen, Starting From **Right Iliac Fossa** & Continuo Doing Percussion in **Upward** Direction Until Reach the Area in Which You Heard it **Dull** In Percussion (**Lower Border of Liver**)
2. > Ask From the **Patient** OR The **Examiner** To Put His **Finger** On the Site of **Lower Border of Liver**.
3. > Localize **Angle of Luis** and Then Localize **Right Second Intercostal Space**, Then Do **Percussion** On the **Right Second Intercostal Space** in **Mid Clavicular Line** & Continuo Doing Percussion in **Downward** Direction Until Reach the Area in Which You Heard it **Dull** In Percussion (**Upper Border of Liver**).
*(**Normally** Upper Border of Liver Locate in **Right Fifth Intercostal Space** **Mid Clavicular Line**).
4. > Now Use Your **Tape Measure**, and Measure **Liver Span** Between **Upper Border** of Liver & **Lower Border** of Liver, (Normally Between **8 - 12 cm**).

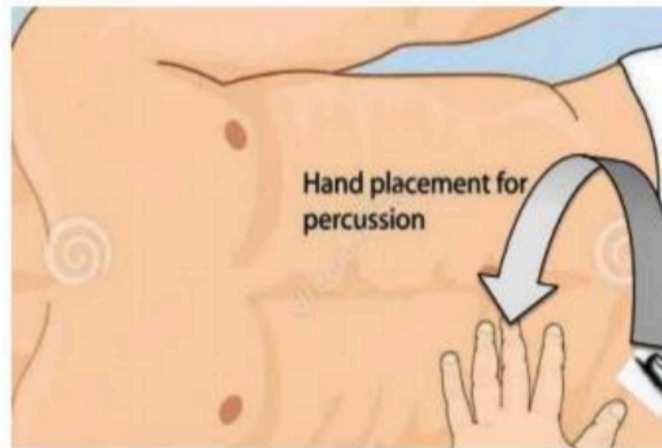
If You Detect **Liver Enlarged**; You Have to Comment On: **Tenderness, Surface, Edge & Consistency.**
If You **Didn't** Palpate the Liver; Do Percussion But **Only** For Upper Border of Liver.



3 Percussion in Downward Direction to Localize the Upper Border of Liver



2 Patient Putting His Fingers On Lower Border



Percussion in Upward Direction to Localize the Lower Border of Liver

1

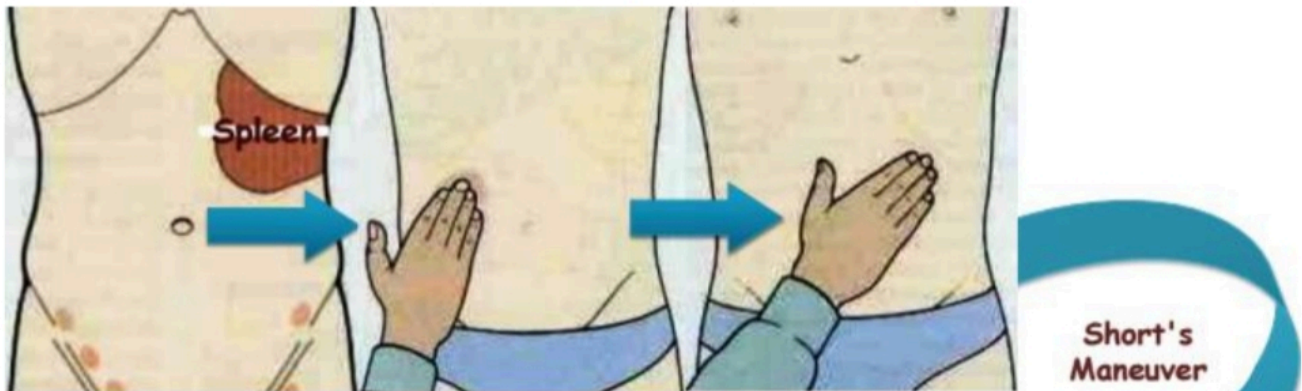
Differential Diagnosis of **Hepatomegaly**:

1. **Heart Failure.** → **Portul HT**
2. **Early Liver Cirrhosis.**
3. **Malignancy: Primary OR Secondary Metastasis, Leukemia.**
4. **Infection: Hepatitis, Hydatid Cyst.**

2. Spleen

Spleen Will Be Palpable If It is 3 Times More Enlarged Than Normal.
Massive Splenomegaly is More Than 8 cm Below Costal Margin.

1. > Right Hand Placed in Right Iliac Fossa.
2. > Ask the Patient to Take Slow Deep Breathing From His Mouth.
3. > Palpate Deeply in Upward Direction By Tip of the Fingers Toward Right Hypochondrium ^{left} Cross Above Umbilicus.
4. > Put Your Left Hand at Left Lateral Side of the Ribs as in the Picture, and Try to Introduce the Tip of Your Right Hand Fingers Inside the Ribs at Left Hypochondrium (Behind the Ribs);
This Maneuver Called → Short's Maneuver,
(You Have to Do Short's Maneuver Even If the Spleen Was Not Palpable).



Short's Maneuver



5.➤ If You Palpate Lower Edge of the Spleen; Confirm it By Percussion On Traube's Area;

***Traube's Area:** is a Crescent Space, about 12 cm Wide,

***Boundary of Traube's Area:**

Medially → left border of the Sternum,

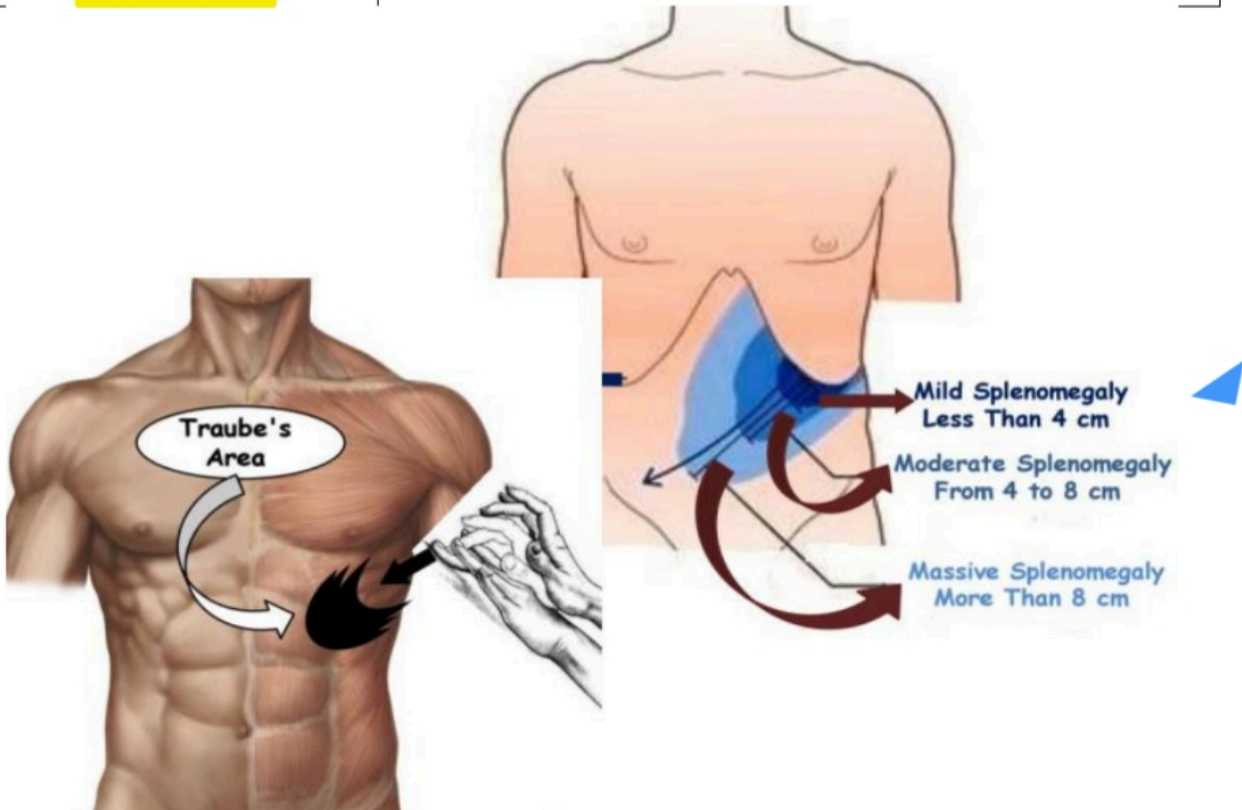
Roof → Oblique Line From 6th Costal Cartilage to the Lower Border of 9th Rib, in the Mid-Axillary Line

The Percussion Tone in Traube's Area is Normally **Tympanic** (Hyper-Resonant);

Because of Underlying **Gas of the Stomach**, But It is **Dull** in Presence of **Enlarged Spleen**.

Differential Diagnosis of Splenomegaly:

Mild Splenomegaly: Less Than 4 cm	ITP, SLE, Sarcoidosis & Amyloidosis. <i>↳ Lupus</i> <i>↳ Thrombocytopenic Purpura</i>
Moderate Splenomegaly: Between 4 - 8 cm	Heamolytic Anemia, Portal HTN & Splenic Vein Thrombosis.
Massive Splenomegaly: More Than 8 cm	Leukemia (CML), Myelofibrosis, Malaria & Kala-azar.



Note:

Hypersplenism Means → Splenomegaly Associated with **Pancytopenia & Hyperplastic Bone Marrow.**

3. Kidney

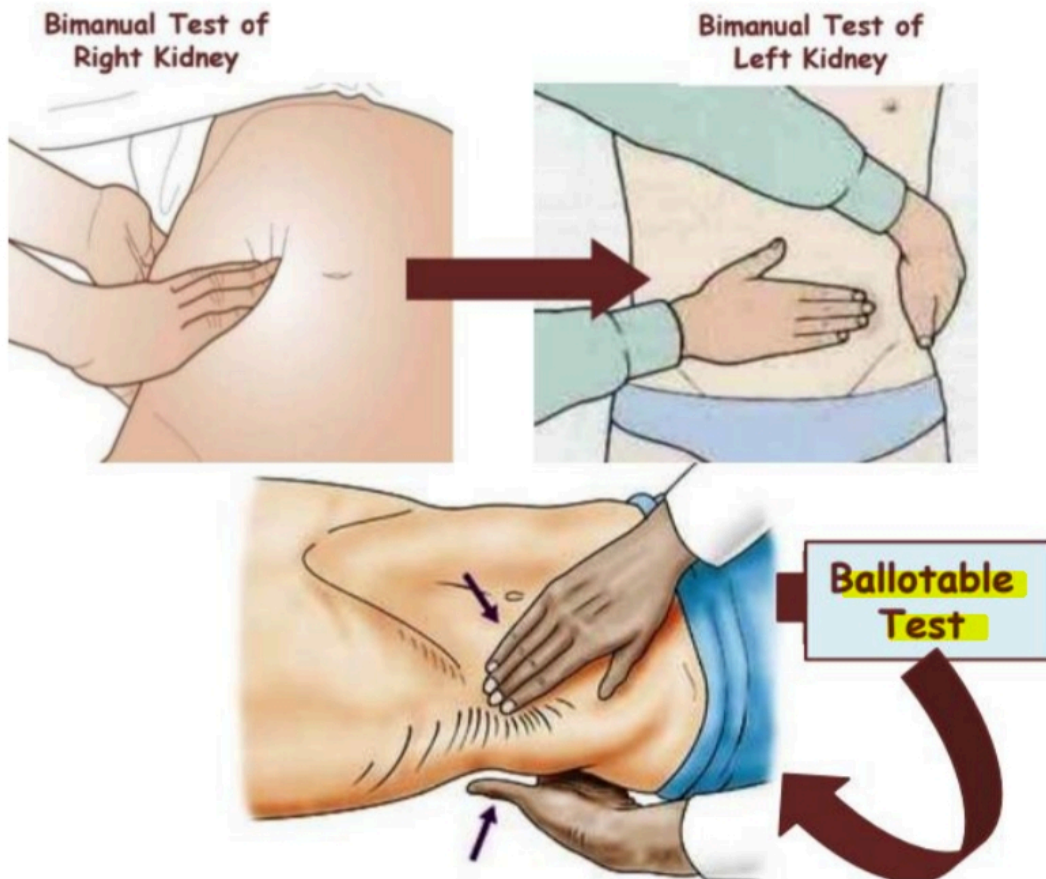
By → **Bimanual Test:**

1. > **Left Hand Placed Posterior Under Loin Area & Right Hand Over the Abdomen in Lumbar Area.**

2. > **Approximate Your Hands.**

3. > If You **Feel Mass Between Your Hands; Do Ballotable Test.**

***Ballotable Test Done By** → Trying to **Pass** The Mass By **Pad** of Your **Right Hand Fingers** & If the Mass **Rebound** Again to Your Hand and You Felt the **Mass Rebounding;** → **Positive Ballotable Test.**



Difference Between Splenemegaly & Palpable Kidney

Spleen:	Kidney:
You Cannot Get Above it (-ve Short's Maneuver). Move with Respiration Downward . Notch May Be Felt. Dull On Percussion. Not Ballotable .	You Can Get Above it (+ve Short's Maneuver). No . No . Resonant On Percussion. Ballotable .

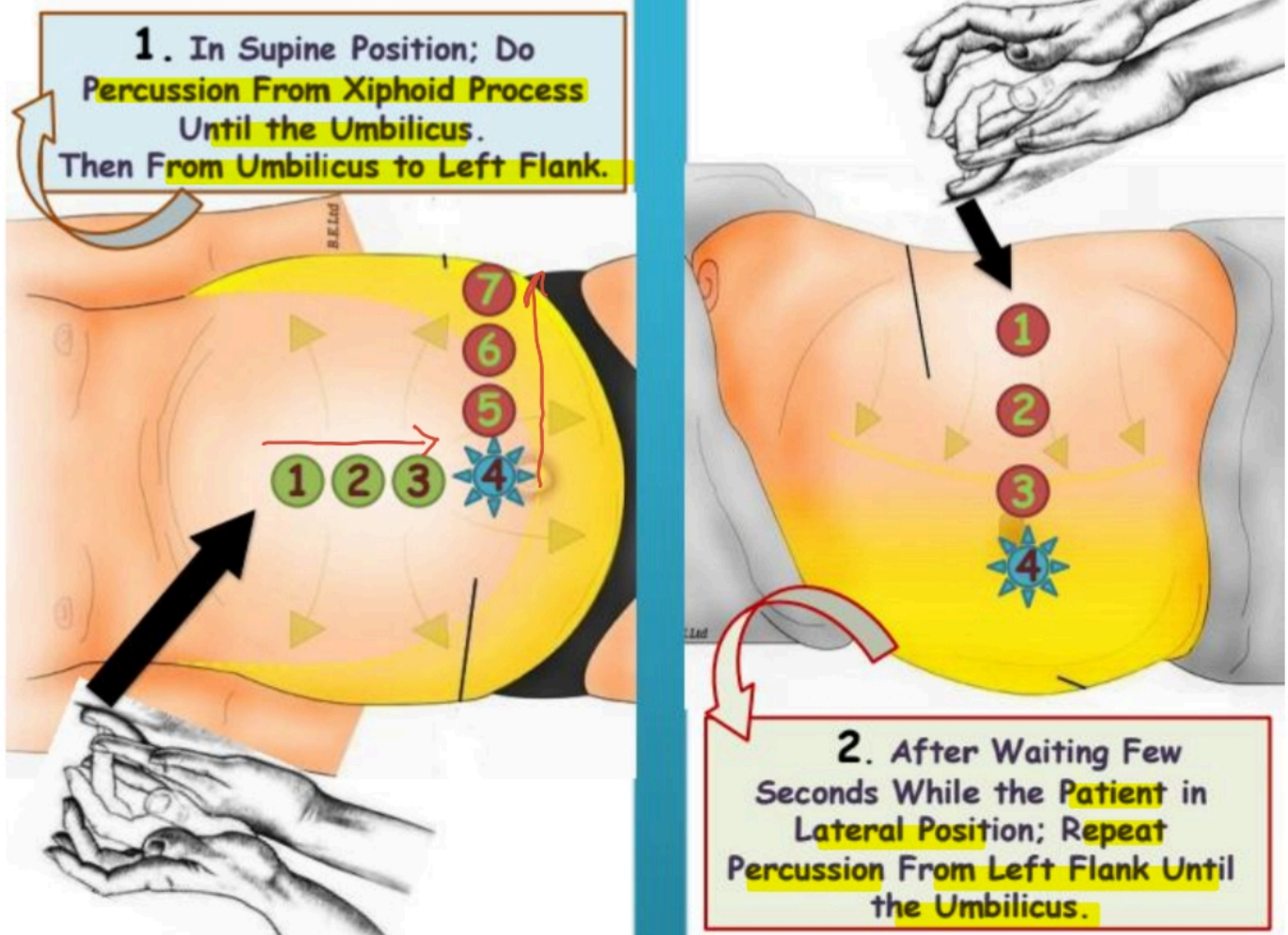
3 ❖ PERCUSSION

Abdominal Percussion Mainly Indicated For **Ascites**.

Types of Percussion On Abdomen:

Shifting Dullness (For **Moderate Ascites**):

1. > Do Percussion From Xiphoid Process Until Umbilicus; (It Will Be Heard → **Resonant**).
2. > Then Do Percussion Toward Right OR Left Flank Until Obtain **Dullness** (Until Heard → **Dull**).
3. > Roll the Patient to the Right OR Left Side (If There is Organomegaly; Roll the Patient to the Opposite Side), and Wait For Few Seconds (10 Seconds).
4. > Then Repeat the Percussion From Right OR Left Flank Toward Umbilicus.
5. > If You Heard Dull Umbilicus After Rolling of the Patient; **Positive Shiting Dullness** → **Ascites**.



Fluid Thrill: (Done Only For **Huge Ascites**).

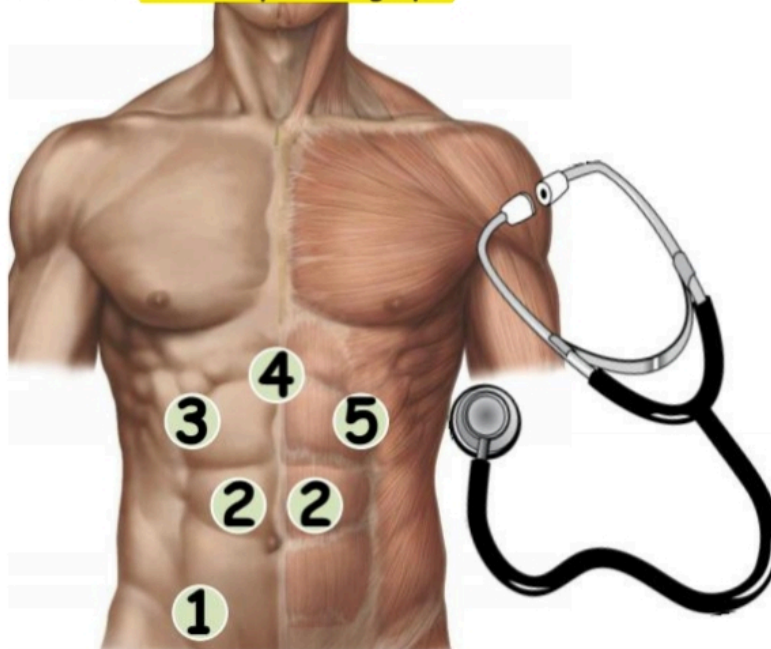
1. > Ask the Patient to Put the **Ulnar Border** of His Hand On the **Vertical Midline** of the **Abdomen**,
(Putting the Hand of the Patient On Vertical Midline; Help You to **Prevent Fat Thrill**)
2. > Put the **Palm** of Your **Left Hand** On the **Left Flank**, and Use Your **Dorsal Surface** of the **Fingers** of Your **Right Hand** to **Tap On Right Flank** For **3 to 5 Times** and **Wait**.
3. > If You Felt **Fluid Waves** Coming to Your **Left Palm** → **Positive Fluid Thrill Test** (**Sever Ascites**)



4❖ AUSCULTATION

Warm Your Stethoscope & Auscultate:

1. > **Bowel Sound:** Put Your Stethoscope On **Right Iliac Fossa** & Wait For **1 Minute**.
Normally You Will Hear Bowel Sound After **5-10 Seconds**, OR → (**3-5 Movement Per Minute**),
Increase in → **Intestinal Obstruction**, **Decrease** OR **Absent** in → **Paralytic Ileus**.
2. > **Renal Artery Bruit:** Put Your Stethoscope **One Inch Above and Lateral to Umbilicus** On the **Right & Left**, and Try To Auscultate Any **Bruit**, Which Indicate → **Renal Artery Stenosis**.
3. > **Venous Hum:** Put Your Stethoscope On **Right Hypochondrium**, and **Epigastric Area** and Try To Auscultate Any **Veous Hum**, Which Indicate → **Portal Hypertention**.
(Also On Right Hypochondrium May You Hear **Bruit**, Which Indicate **Hepatoma + Alcoholic Hepatitis**).
4. > **Epigastric Murmur:** Put Your Stethoscope On **Epigastric Area**, and Try To Auscultate Any **Murmur**, Which Indicate → **Tricuspid Regurgitation**.
5. > **Splenic Fracton Rub:** Put Your Stethoscope On **Left Hypochondrium**, and Try To Auscultate **Spelnic Fracton Rub**, Which Indicate → **Splenomegaly**.



*At Last Say to The Examiner: → I Would Like to Examine Genetalia & To Do P-R Examination:

P-R Examination:

- ***Inspection:** For → Peri Anal Disease (Fissure, Heamorrhoids), **Skin Tag** & **Fistula**.
- ***Palpation:** For → **Mass** Indicate **Cancer Colon** & **Cancer Prostate**.
- ***Tone Measuring:** For → Anal Shphincter **Incotenance**.
- ***Look at Stool** For → Color (**Bloody, Black, Pale**).