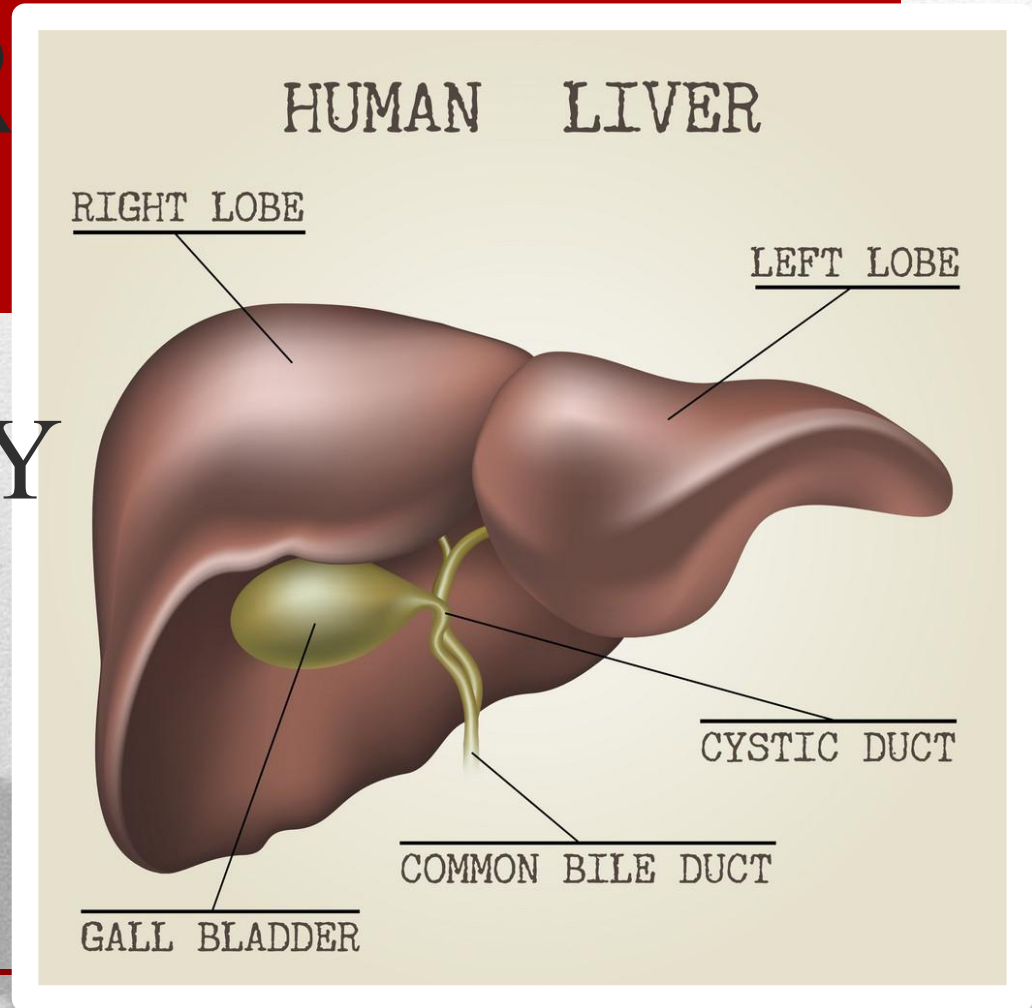
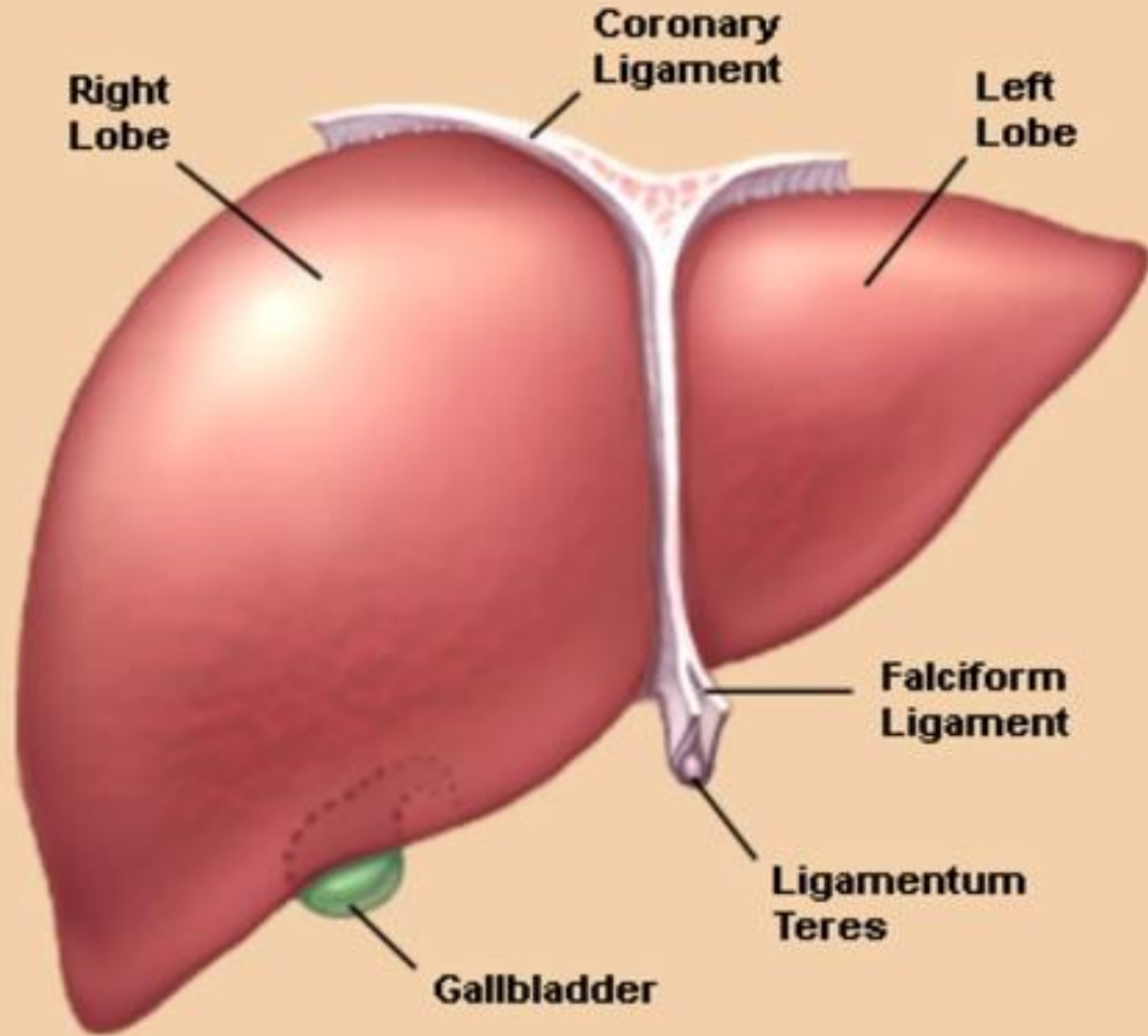


INVESTIGATION OF THE LIVER

VOCABULARY





- **Liver - печень**
- **bulging - вздутие, разбухание; выпячивание, выпуклость**
- **hypochondrium - подреберная область**
- **costal margin - реберный край**
- **costal arch - реберная дуга**
- **hepatic border – граница печени**

VOCABULARY

- **tenderness** - чувствительность, болезненность
- **pointing** – указывающий
- **consistency** – плотность, консистенция
- **extend** – расширяться, выходить за границы
- **enlargement** - увеличение

VOCABULARY

- **inspiration – ВДОХ**
- **expiration – ВЫДОХ**
- **to descend - опускаться, снижаться**
- **to retract - втягиваться, вбираться;
отводиться назад**

VOCABULARY

Palpation

- **Liver**

- 1. Start palpation in the right iliac fossa
- 2. Press your right hand into the abdomen as you ask the patient to take a deep breath
- 3. Feel for a step, as the liver edge passes below your hand
- 4. If you don't feel anything, repeat the process with your hand 1-2 cm higher .
- **If you feel the liver edge, note the following:**
- Degree of extension below the costal margin
- Consistency of the liver edge (smooth/irregular)
- Tenderness – *suggestive of hepatitis*
- Pulsatility – *a pulsatile enlarged liver can be caused by tricuspid regurgitation*





Palpation of the Liver

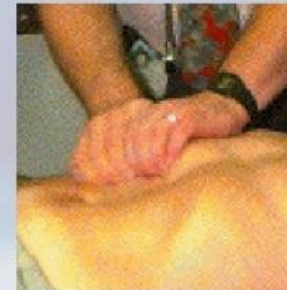
Standard Method

- Place your fingers just below the right costal margin and press firmly.
- Ask the patient to take a deep breath.
- You may feel the edge of the liver press against your fingers. Or it may slide under your hand as the patient exhales. A normal liver is **not** tender.



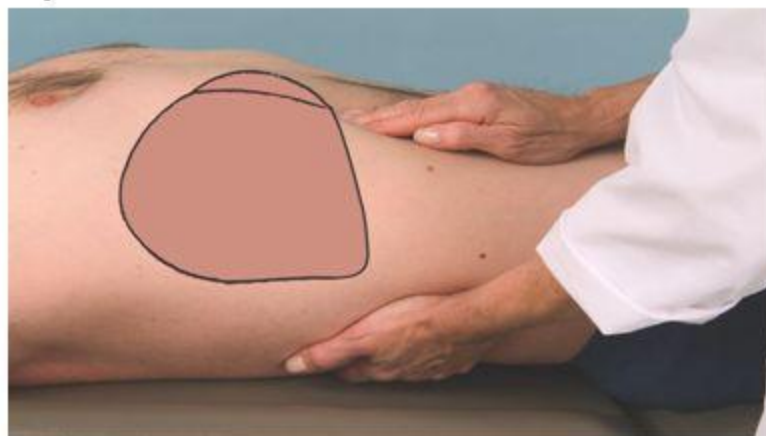
Alternate Method

- This method is useful when the patient is obese or when the examiner is small compared to the patient.
- Stand by the patient's chest.
- "Hook" your fingers just below the costal margin and press firmly.
- Ask the patient to take a deep breath.
- You may feel the edge of the liver press against your fingers.



Palpation of the liver:

- Palpate the liver to detect enlargement and tenderness
- Stand on the client right side .
- Place your left hand on posterior thorax about 11th and 12th rib .
- Place your right hand parallel to the rectus muscle with fingers pointing toward the rib cage.
- During exhalation palpate with a depth of 4 to 5 cm
- Maintain your hand position & ask the client to inhale deeply, while the client inhale, feel the liver border move against your hand.



Objective Data- Palpation

- Alternate method for palpating the liver is the **HOOKING** technique
 - Stand at patient's shoulder and face patient's feet
 - Hook fingers over the costal margins from above
 - Patient to take a deep breath
 - Feel for the liver edge to bump your fingertips during inhalation



Fig. 21-26. Hooking technique.

Palpation of the Liver



- **Alternate Method for Liver Palpation**
- An alternate method for palpating the liver uses hands "hooked" around the costal margin from above. The patient should be instructed to breath deeply to force the liver down toward your fingers.



Percussion of liver

- When percussing the liver you are measuring it's size, start at the right mid-clavicular line where you will start with lung resonance and percuss down the sound changes to dullness. Then percuss up starting in the mid clavicular line level with umbilicus and note where the sound changes. Measure between these two points .

