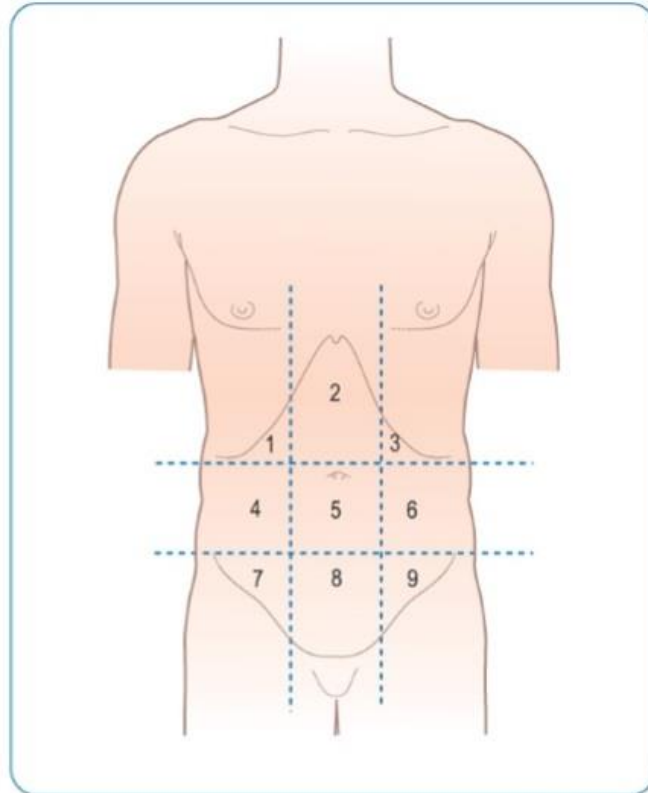


## 9. Palpation of the liver

The abdominal muscles should be relaxed to enhance the palpation. Stand at the patient's right side. Palpation is performed to determine liver shape, surface, consistency and tenderness.



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Figure 8.5 Regions of the abdomen. 1 and 3: right and left hypochondrium; 2: epigastrium; 4 and 6: right and left lumbar; 5: umbilical; 7 and 9: right and left iliac; 8: hypogastrum or suprapubic.

### Methods for palpation of the liver. Technique. Normal and pathological findings.

- Single – handed palpation

The right hand of the examiner is placed below the level of the percussed dullness of the inferior liver margin in the midclavicular line parallel to the rectus muscle. This is the best point to feel the liver.



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Figure 8.9 Correct method of palpation. The hand is held flat and relaxed, and 'moulded' to the abdominal wall.

- Bimanual palpation

Have your left hand placed behind the patient parallel to and supporting the right 11<sup>th</sup> and 12<sup>th</sup> ribs and nearby soft tissues below. Place your right hand on the patient's right abdomen lateral to the rectus muscle, with your fingertips far below the lower border of liver dullness. Having done those two things you should ask the patient to take a deep breath. You should try to feel the edge of the liver as it meets your fingertips. If you do feel it, than light the pressure of the hand you are palpating with so that the liver can slip under your finger pads and you can feel its anterior surface.

**If palpable at all, the edge of a normal liver is soft, sharp, and regular, it's surface smooth. The normal liver may be slightly tender.** On inspiration, the liver is palpable about 3 cm below the right costal margin in the midclavicular line.



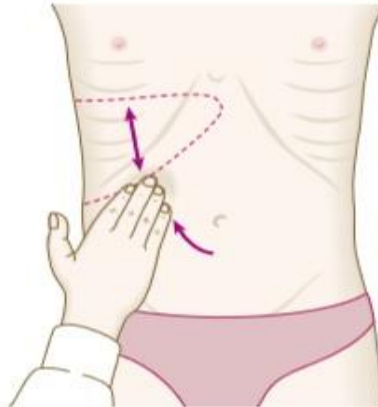
- The “hooking technique”


The hooking technique is especially helpful when the patient is obese. Position to the right of the patient's chest. Have both hands on the right abdomen below the border of liver dullness. Press in with your finger pads up toward the costal margin. Ask the patient to take a deep breath. The liver edge shown on the next picture is palpable with fingerpads of both hands.



### 5 Assessment of liver size

- Start in the right iliac fossa.
- Progress up the abdomen 2 cm with each breath (through open mouth).
- Confirm the lower border of the liver by percussion.
- Detect if smooth or irregular, tender or non-tender; ascertain shape.
- Identify the upper border by percussion.
- Clinical assessment of hepatomegaly important in diagnosing liver disease



|  Liver size  |
|---|
| <b>Large liver (hepatomegaly)</b>   |
| <ul style="list-style-type: none"><li>• Liver metastases</li><li>• Multiple or large hepatic cysts</li><li>• Cirrhosis<ul style="list-style-type: none"><li>Alcohol</li><li>Haemochromatosis</li></ul></li><li>• Hepatic vein outflow obstruction</li><li>• Infiltration<ul style="list-style-type: none"><li>Amyloid</li></ul></li></ul> |
| <b>Small liver</b>  |
| <ul style="list-style-type: none"><li>• Cirrhosis</li></ul>   |