Inspection

Observe the abdomen for irregular contours, discoloration, and bulges.

Abdominal contour is the profile line from the rib margin to the pubic bone viewed by the examiner at a right angle to the umbilicus when the patient is supine. A flat contour lies in an approximately horizontal plane from the rib cage to the pubic area. A rounded contour is convex. A scaphoid is concave. A slender patient will have a flat or slightly concave abdomen. An obese patient has a convex abdomen. Abnormal contours are: a distended abdomen, or marked concavity.

Striae are streaks of linear scars that often result from rapidly developing tension in the skin. Also called stretch marks.

Cullen's sign: Irregular patch of blue-black skin around the umbilicus that indicates intraperitoneal bleeding.

Gray Turner's sign: Irregular patch of blue-black skin to the flanks indicating retroperitoneal bleeding. Also called Turner's sign.

To help detect an umbilical or incisional hernia ask the patient to raise his head and shoulders while remaining supine. A reducible hernia is one that naturally goes back into the abdomen or can be pushed back into the abdominal cavity.

In some thin patients, aortic pulsations may be seen in the epigastric area.

Auscultation

Listen for bowel sounds, bruit, venous hum, or friction rub.

Auscultate all four quadrants. Listen for 3 to 5 minutes to confirm absence of bowel sounds. Before reporting absent bowel sounds press on the abdominal or ask the patient to eat or drink something to simulate bowel activity. Normal bowel sounds are bubbling or gurgling noises heard 5 to 35 times a minute in an irregular pattern. Hypoactive bowel sounds occur less than every 5 minutes. Hyperactive bowel sounds occur more than 35 times a minute. Borborygmi are abdominal sounds that occur every 3 seconds. They can sound like rumbling, gurgling, or tinkling noises. "Borborygmi" is the plural of borborygmus.

A bruit is a high-pitched soft swishing sound heard with systolic timing. Listen for a bruit superior to the umbilicus, and to the upper and lower, right and left of the abdominal midline. If a bruit is noted then check pedal pulses. A bruit and weak pedal pulses suggest an aneurysm.

Listen with the bell of the stethoscope for a venous hum over the periumbilical area. It will sound like a soft, continuous sound. A venous hum can be heard when blood flow is increase.

A friction rub is a harsh grating sound indicating inflammation of the peritoneal surface. Normally you should not detect any bruit, hum, or friction rub.

Contraindications for percussion and palpation

- A patient with a suspected abdominal aneurysm.
- A rigid abdomen which suggests underlying peritoneal inflammation.
- Recent surgery

Palpation

Palpate to determine presence and location of pain or masses and to detect ascites.

When palpating the abdomen, palpate any painful or tender area last. Use the pads of your fingers to palpate lightly (about 1 cm.) in all four quadrants. Then press more deeply, (about 4 cm.). If your patient has suffered blunt trauma, ask him to contract his abdominal wall during palpation. This will help you distinguish muscle-wall tenderness from intraabdominal tenderness. Muscle-wall contraction increases muscle-wall tenderness and decreases intraabdominal tenderness. To test for rebound tenderness, press firmly over an area of the abdomen that is remote from the area of discomfort, and release the hand suddenly. If a sharp stabbing pain is felt at the original discomfort, this is rebound tenderness. This is a sign of inflammation of the peritoneum.