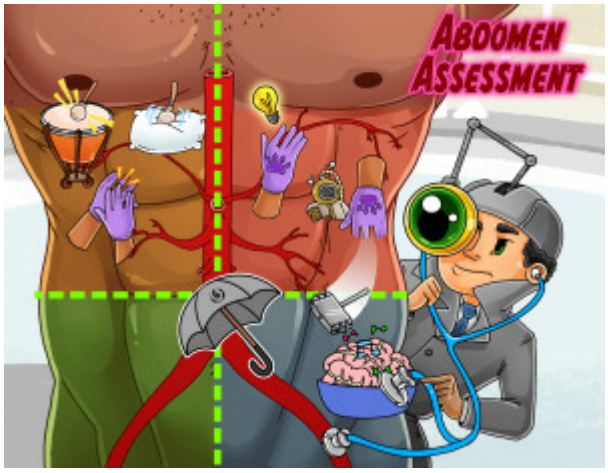
# Abdomen Assessment

Start the abdominal assessment by mentally dividing the abdomen into four quadrants and placing the organs in each quadrant in your imagination. Observe the abdomen for contour and symmetry, checking for bumps, bulges, masses, lesions and scars. Observe the umbilicus, which should be inverted and located at the midline in the abdomen. To auscultate bowel sounds, start by placing the stethoscope diaphragm in the right lower quadrant (below and to the right of the umbilicus) auscultate in a clockwise direction in each of the four quadrants. Note the character and quality of bowel sounds in each quadrant. Auscultate for vascular sounds with the bell of the stethoscope. With firm pressure, listen over the aorta, renal, iliac and femoral arteries for bruits, friction rubs and venous hums. Percussion is used to detect the size and location of abdominal organs and to detect air or fluid in the abdomen, stomach or bowel. When percussing the abdomen, two sounds will be heard; either tympany or dullness. When percussing over hollow organs, tympany will be heard. When percussing over solid organs, the sound will change to dullness. Light palpation helps identify muscle resistance and well as location of superficial organs. Put the fingers of one hand close together, depress the skin about a half of an inch (1.5 cm) with your fingertips, and make gentle, rotating movements, avoiding quick jabs. For deep palpation, push the abdomen down 2 to 3 inches (5 to 7.5 cm). Palpate the entire abdomen in a clockwise motion, checking for tenderness, pulsations, organ enlargement and masses. If the patient has a rigid abdomen, don't palpate it. If peritoneal inflammation is suspected, perform the test for rebound tenderness. Do this at the end of the examination. Choose a site away from any painful area, position hand at a 90-degree angle to the abdomen, then withdraw hand quickly. Rapid withdrawal causes the underlying structures to rebound suddenly and results in a stabbing, sharp pain on the inflamed side. Don't repeat this maneuver.




PLAY PICMONIC

## Inspect the Abdomen

**4 Quadrants**

4 Quadrants

Start the assessment by mentally dividing the abdomen into four quadrants and placing the organs in each quadrant in your imagination. Remember that anything above the umbilicus and between the costal margins is epigastric, around the navel is umbilical, and above the symphysis pubis is subrapubic.

**Contour, Shape, Symmetry**

Contour, Shape, Symmetry

Observe the abdomen for contour and symmetry, checking for bumps, bulges, masses, lesions and scars. The abdomen should range from flat to rounded in people of average weight. A protruding abdomen could be due to obesity, pregnancy, ascites, or abdominal distention.

**Umbilicus**

Umbrella

Observe the umbilicus, which should be inverted and located at the midline in the abdomen. If the umbilicus is protruding, this could be due to pregnancy, ascites or an underlying mass. If the umbilicus is protruding, this could indicate an umbilical hernia.

## Auscultate

**Bowel Stethoscope**

Bowl-bowl Sounds

Starting by placing the stethoscope diaphragm in the right lower quadrant (below and to the right of the umbilicus) auscultate in a clockwise direction in each of the 4 quadrants. Note the character and quality of bowel sounds in each quadrant. In some situations, you may need to auscultate for up to 5 minutes before you hear sounds. Be sure that you wait a sufficient amount of time before deciding if there are abnormalities or absent bowel sounds. Bowel sounds are classified as normal, hypoactive, or hyperactive. Hyperactive bowel sounds are loud, high-pitched sounds that may indicate diarrhea, constipation, laxative use, or GI disorders. Hypoactive bowel sounds are indicative of ileus, bowel obstruction, peritonitis and indicate diminished peristalsis. This can also be caused by the use of opioid analgesics.<br>

**Vascular Sounds**

Vessel Stethoscope

Auscultate for vascular sounds with the bell of the stethoscope. With firm pressure, listen over the aorta, renal, iliac and femoral arteries for bruits, friction rubs and venous hums.

## Percussion

### Percuss 4 Quadrants

Percussing 4 Quadrants

Percussion is used to detect the size and location of abdominal organs and to detect air or fluid in the abdomen, stomach or bowel. With direct percussion, you will strike your hand or finger directly against the patient's abdomen. Indirect percussion is when you strike your middle finger of your dominant hand (or a percussion hammer) to strike your finger resting on the patient's abdomen. Begin percussion in the right lower quadrant and continue clockwise, covering all four quadrants. Remember to avoid percussing the abdomen of a patient with an abdominal aortic aneurysm or transplanted abdominal organ.

### Tympany or Dullness

Tympany-drum and Dull-pillow

When percussing the abdomen, two sounds will be heard; either tympany or dullness. When percussing over hollow organs, like an empty stomach or bowel, clear, hollow sounds will be heard. This is called tympany. This occurs because air is normally present in the stomach and bowel. The degree of tympany depends on the amount of air. When percussing over solid organs, like the liver, kidney or intestines filled with fecal matter, the sound will change to dullness. Percussion of the liver will help you determine its size, which can indicate liver disorders like hepatomegaly.

## Palpate

### Light Palpation

Light Paw

Abdominal palpation includes light and deep touch to determine size, shape, position and tenderness of abdominal organs. Palpate all four quadrants, leaving tender areas for last. Light palpation helps identify muscle resistance and well as location of superficial organs. Put the fingers of one hand close together, depress the skin about a half of an inch (1.5 cm) with your fingertips, and make gentle, rotating movements, avoiding quick jabs.

### Deep Palpation

Deep-diver Paw

Abdominal palpation includes light and deep touch to determine size, shape, position and tenderness of abdominal organs. Palpate all four quadrants, leaving tender areas for last. For deep palpation, push the abdomen down 2 to 3 inches (5 to 7.5 cm). Palpate the entire abdomen in a clockwise motion, checking for tenderness, pulsations, organ enlargement and masses. If the patient has a rigid abdomen, don't palpate it. This could be due to peritoneal inflammation and palpation could rupture an inflamed organ.

### Rebound Tenderness

Rebound Tenderizer

If peritoneal inflammation is suspected, perform the test for rebound tenderness. Do this at the end of the examination. Choose a site away from any painful area, position hand at a 90-degree angle to the abdomen, then withdraw hand quickly. Rapid withdrawal causes the underlying structures to rebound suddenly and results in a stabbing, sharp pain on the inflamed side. Don't repeat this maneuver. <br>