

Assessment for Ascites

Physicians should be familiar with the signs of ascites and physical examination maneuvers that can be used to detect ascites. The sensitivity of these maneuvers is limited by the amount of peritoneal fluid present, and ultrasound is useful in defining small amounts of fluid. A pleural effusion is found in a small percentage of patients with ascites, usually on the right side. This is due to the presence of a diaphragmatic defect that allows ascitic fluid to pass into the pleural cavity.

Signs of Ascites

- Increase in abdominal girth and weight gain
- Everted umbilicus
- Scrotal edema
- Bulging flanks when patient lying supine
- Tympany over the umbilicus and dullness over the lateral abdomen and flank areas upon percussion
- Positive fluid wave test or shifting dullness test

Fluid Wave Test

- Patient lies supine
- Assistant presses ulnar surface of hand downward into the patient's mid-abdomen
- Examiner taps flank sharply with right hand while placing fingertips of left hand along other flank
- Examiner's left hand receives impulse or shock wave on opposite flank
- Examiner should anticipate time lag between tap and impulse received
- Test is positive if the impulse is felt, implying that it was passed by ascitic fluid

Shifting Dullness Test

- Patient lies supine
- Examiner percusses from mid-abdomen to flank area and notes change from tympany to dullness
- Examiner marks dullness line with a pen
- Patient turns on his side away from examiner
- Examiner percusses from the umbilicus to flank area and re-marks the line of dullness
- Test is positive when the area of dullness shifts to the dependent site, implying presence of ascites
- Limitations of test include
 - False positives in those with a lot of mesenteric fat and feces in bowel
 - Test requires at least 500 cc of ascitic fluid

