## Abdomen

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Do</strong></td>
<td><strong>Do</strong></td>
<td><strong>Do</strong></td>
</tr>
</tbody>
</table>
| 1. Inspect  
   - Abdominal wall and flanks for contour, masses, venous pattern and movements  
2. Auscultate  
   - For presence of bowel sounds and for presence of bruits if arterial insufficiency suspected (flanks, femoral and mid-abdomen with bell)  
3. Percuss  
   - Liver along mid-clavicular line to determine span  
   - Splenic borders in lowest intercostal space in left anterior axillary line at full expiration and inspiration.  
   - All four quadrants including above symphysis pubis for bladder distention and costovertebral angle for tenderness  
4. Palpate  
   - All four quadrants superficial first then deep using bimanual technique  
   - Liver for enlargement, tenderness and consistency  
   - Spleen using bimanual technique in right lateral decubitus  
   - Kidneys using bimanual technique  
   - Aorta  
**Know:**  
   - Patients with tense abdominal muscles can be relaxed by supporting bent knees with a pillow.  
   - Normal liver span at mid-clavicular line is 6-12 cm.  
   - The spleen is typically not palpable in normal patients and in thin patients the kidneys are often palpable.  
| Percuss for shifting dullness and for fluid wave in patients with abdominal distention to detect ascites.  
   - Shifting dullness is determined by percussing circumferentially on the abdomen and determining the transition points between resonance and dullness (these spots are marked on each side).  
   - The patient is rolled on their side and again percussed as above to determine if this transition point has “shifted”.  
   - Fluid wave is determined by having an assistant place the edge of their hand on the mid abdomen. Palpate gently at the flank with one hand while quickly thumping the other flank with the other hand. Sensing a shock wave with the palpating hand is indicative of ascites.  
| Assess for Murphy’s sign in patients suspected of having cholecystitis. This is done by palpation of the right upper quadrant with steady pressure asking the patient to inhale deeply.  
   - Assess for signs of peritonitis in appropriate patients by assessing for rebound tenderness. This is done by abruptly withdrawing the hand after palpation of the abdomen. Increased pain or wincing is indicative of peritonitis  
**Know:**  
   - A positive Murphy sign is pain causing an abrupt halt of inspiration with palpation of the right upper quadrant. This is indicative of cholecystitis.  
   - McBurney’s point is located just below the midpoint of a line joining the umbilicus and the right anterior superior iliac spine. Tenderness at this spot is indicative of appendicitis until rupture and generalized peritonitis supervenes  
   - Guarding or abdominal muscle rigidity is caused by peritoneal inflammation  

*Educators-4-CARE Benchmarks 2009-10, v1*