SMALL GROUP SESSION 20  
January 31st or February 2nd

Abdominal Pain Case and Abdominal Examination Workshop

Readings for this week:

- Complete the abdominal exam module on the POM-1 web-site.
- Optional: Mosby 4th ed. pp 513-518 and 524-543 or 5th ed. pp 536-553

Mentors: Bring pads, cleaning supplies, gowns, and hand washing gel.

Prepare by:

- Wearing clothing that will allow for examination of the abdomen: two-piece outfits; bringing your stethoscope.
- A group member should bring anatomy text or notes and atlas.

Session Overview

Section 1. Touch base
Section 2. Abdominal pain case
Section 3. Abdominal examination
Section 4. Evaluation
Part 1. Touch base (15 minutes)

Part 2. Case discussion (60 minutes)

Objectives:

1. To apply knowledge of abdominal anatomy to a patient with abdominal pain.
   - To better understand the anatomy of the abdomen
   - To relate historical and physical exam findings to abdominal organs and their disorders.

Logistics:

A student interviews the mentor, who plays the patient in the case.

Then mentors hand out the case for discussion.

Pick a scribe to record discussion, and then choose learning objectives.

We suggest that you write findings or questions in several columns:

- History
- Physical findings
- Anatomy
- Issues (physician, patient, ethical)
- Diagnostic possibilities
- Laboratory and test findings, if any
Part 3. Examination of the abdomen (90 minutes)

Goals: To learn the techniques of abdominal exam

Objectives:

To practice the following aspects of the abdominal exam:

- **Inspection:** for distension, scars, hernias, asymmetry, etc.

- **Auscultation:** (before you touch the abdomen):
  - For normal bowel sounds: in all four quadrants
  - For bruits: over the aorta, renal arteries and iliac arteries

- **Percussion:**
  - Of the liver: estimate liver size by percussing up from the abdomen and down from the chest, both at the right midclavicular line
  - Of the spleen: look for enlarged spleen by percussing just above the lowest rib in the left anterior axillary line, first at rest, then in the same location while patient takes and holds a deep breath
  - Of all four quadrants, listening for changes in pitch or quality

- **Palpation:**
  - Of liver edge by deep palpation, starting low in the abdomen and moving up to the right costal margin at the midaxillary line
  - For enlarged spleen, holding rib cage up from below with your left hand while pressing inward with the right hand, starting at the left lower quadrant
  - For aortic pulsation, using palmar surface of fingers of both hands, or thumb and forefinger of one hand in the upper abdomen, just left of midline
  - For masses and tenderness: once lightly and once deeply

*Percussion of kidneys for CVA tenderness:* just under the lowest rib posteriorly on both sides

Part 4: Evaluation (5 minutes)

How did this small group go? What could it make it work better in the future?
## Abdominal Examination Checklist

<table>
<thead>
<tr>
<th>Procedure</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. INSPECTION: Ex inspects abdomen for color, contour, symmetry, movement, scars. (Ex states what they are inspecting for.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. AUSCULTATION: Ex listens to ALL FOUR QUADRANTS of the abdomen: right upper, left upper, right lower, and left lower. Ex MUST auscultate before palpating or percussing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ex listens to the AORTIC artery (located in the middle of the abdomen above the umbilicus), the RENAL arteries (located above the umbilicus), and the ILIAC arteries (located below the umbilicus bilaterally)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. LIVER PERCUSSION: Ex begins percussing the liver in the right midclavicular line at the level between the lower right chest and the umbilicus and proceeds superiorly. Then, Ex begins in the right midclavicular line over the lung and proceeds inferiorly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. SPLEEN PERCUSSION: Ex percusses just above lowest rib on the left anterior axillary line and then repeats while Pt holds a deep breath.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. GENERAL PALPATION: Ex first palpates all four quadrants and the epigastrium LIGHTLY while using the palmar surface of the fingers to identify any masses or areas of tenderness.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. DEEP PALPATION: Ex palpates all four quadrants and the epigastrium more DEEPLY while using the palmar surface of the fingers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. LIVER - RIGHT COSTAL MARGIN: Ex places his/her hand on the lower right quadrant of Pt’s abdomen and gently presses in and upward. Ex asks Pt to take a deep breath and then exhale while Ex moves his/her hand upward toward the right.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. SPLEEN - LEFT COSTAL MARGIN: Ex places his/her left hand around Pt’s left lower rib cage and gently presses upwards against back. Ex’s right hand is placed below the left costal margin and pressed inward toward the spleen. Ex should start in the lower left quadrant and work up towards the upper left quadrant.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. AORTIC PULSE: Ex uses opposing thumb and finger or palmar surface of fingers and palpates the aortic pulsation located in the upper abdomen slightly to the left of midline.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. CVA TENDERNESS: Ex uses his/her fist and percusses the kidneys just under the lowest rib posteriorly on both sides.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>