AMSER Case of the Month: December 2019

Acute Abdominal Pain

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Patient Presentation

- **CC:** 68-year-old female presenting with abdominal pain for 1 day
- **HPI:** The patient presented to the ED due to diffuse, gnawing abdominal pain since the night before. She also noticed worsening abdominal distension, non-bloody diarrhea, and nausea. She denied fever, vomiting, or weight loss.
- **PMH:** Uterine fibroids
- **PSH:** Laparoscopic hysterectomy
- **Meds:** None
- **Social Hx:** Denies tobacco, alcohol, and illicit drug use
- **Physical Exam:** soft, distended abdomen, mild diffuse tenderness to palpation
- **Vitals:** Temp 98.5, BP 146/69, HR 62
Pertinent Labs

- CBC, BMP, and LFTs are within normal limits
What Imaging Should We Order?
## ACR Appropriateness Criteria

### Variant 4: Acute nonlocalized abdominal pain. Not otherwise specified. Initial imaging.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Appropriateness Category</th>
<th>Relative Radiation Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT abdomen and pelvis with IV contrast</td>
<td>Usually Appropriate</td>
<td>⭐⭐⭐⭐⭐</td>
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<tr>
<td>CT abdomen and pelvis without IV contrast</td>
<td>Usually Appropriate</td>
<td>⭐⭐⭐⭐</td>
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<tr>
<td>MRI abdomen and pelvis without and with IV contrast</td>
<td>Usually Appropriate</td>
<td>O</td>
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<tr>
<td>US abdomen</td>
<td>May Be Appropriate</td>
<td>O</td>
</tr>
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<tr>
<td>Radiography abdomen</td>
<td>May Be Appropriate</td>
<td>⭐⭐</td>
</tr>
<tr>
<td>FDG-PET/CT skull base to mid-thigh</td>
<td>Usually Not Appropriate</td>
<td>⭐⭐⭐⭐⭐⭐</td>
</tr>
<tr>
<td>In-111 WBC scan abdomen and pelvis</td>
<td>Usually Not Appropriate</td>
<td>⭐⭐⭐⭐⭐⭐</td>
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<tr>
<td>Tc-99m cholescintigraphy</td>
<td>Usually Not Appropriate</td>
<td>⭐⭐</td>
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<tr>
<td>Fluoroscopy upper GI series with small bowel follow-through</td>
<td>Usually Not Appropriate</td>
<td>⭐⭐⭐⭐</td>
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<tr>
<td>Fluoroscopy contrast enema</td>
<td>Usually Not Appropriate</td>
<td>⭐⭐⭐⭐</td>
</tr>
</tbody>
</table>

This imaging modality was ordered by the ER physician.
Findings: (unlabeled)
Findings: (labeled)

Numerous distended small bowel loops

Narrowed loop of bowel, medial to femoral vein

Distended, fluid-filled bowel, compressing the femoral vein

Distended, fluid-filled bowel, compressing the femoral vein
Final Dx:
Strangulated femoral hernia complicated by small bowel obstruction
Case Discussion

• Femoral hernias protrude through the femoral ring, below the inguinal ligament, medial to the femoral vein (often compressing it).

• On CT, femoral hernias are seen lateral to the pubic tubercle (yellow arrowhead).
  • In comparison to inguinal hernias, which are typically located medial to the pubic tubercle.
Femoral hernias account for approximately 4% of groin hernias and are more common in women.

40% of femoral hernias present with incarceration or strangulation.

Even uncomplicated femoral hernias are often treated surgically due to the high risk of future complications.

Urgent surgical repair of hernia is indicated when complicated by small bowel obstruction, or when strangulation is suspected.
https://acsearch.acr.org/docs/69467/Narrative/.


