AMSER Case of the Month: October 2018

57 y/o female presenting with lower left quadrant abdominal pain

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Patient Presentation

• CC/HPI: 57 year old female presents with sharp abdominal pain in the lower left quadrant. The pain is acute and constant.
• PMHx: none
• PSHx: none
• Physical Exam: Vitals within normal range. Guarding and tenderness of lower left quadrant.
• Labs: WBCs unremarkable, Negative b-HCG
What Imaging Should We Order?
Select the applicable ACR Appropriateness Criteria

This imaging modality was ordered by the ER physician.

<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 with and with IV contrast</td>
<td>Usually Appropriate</td>
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<tr>
<td>US abdomen</td>
<td>May Be Appropriate</td>
<td>O</td>
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<tr>
<td>MRI abdomen and pelvis without IV contrast</td>
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<td>May Be Appropriate</td>
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<tr>
<td>X-ray abdomen</td>
<td>May Be Appropriate</td>
<td>⭐⭐⭐⭐⭐⭐</td>
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<tr>
<td>FDG-PET/CT skull base to mid-thigh</td>
<td>Usually Not Appropriate</td>
<td>⭐⭐⭐⭐⭐⭐</td>
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<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 cholestintigraphy</td>
<td>Usually Not Appropriate</td>
<td>⭐⭐⭐⭐⭐⭐</td>
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<tr>
<td>X-ray upper GI series with small bowel follow-through</td>
<td>Usually Not Appropriate</td>
<td>⭐⭐⭐⭐⭐⭐</td>
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<tr>
<td>X-ray contrast enema</td>
<td>Usually Not Appropriate</td>
<td>⭐⭐⭐⭐⭐⭐</td>
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</tbody>
</table>
Findings: (labeled)

Epiploic appendage inflammation
Imaging Findings

• Abdominopelvic CT with IV contrast reveals an inflamed epiploic appendage.
  • Epiploic appendages are only seen on CT if inflamed, calcified, or surrounded by intraperitoneal fluid.

• The left-sided pericolic lesion demonstrates a fat density with a hyperdense rim. This is suggestive of an epiploic appendage surrounded by inflamed visceral peritoneum.

• Fat stranding is also identified around the epiploic appendage.
Final Dx:

Epiploic Appendagitis
Case Discussion

- Epiploic appendages are peritoneal pouches that project from the serosal surface of the colon.
  - Most adults have 50-100 epiploic appendages that range from 0.5-5cm in length with the largest near the sigmoid colon.
  - They are composed of adipose tissue, supplied by one or two arteries from the colonic vasa recta longa and drained by one vein.

- Primary epiploic appendagitis is caused by torsion or venous thrombosis of the epiploic appendage.

- Secondary epiploic appendagitis is caused by inflammation of adjacent organs.
Case Discussion

- Primary epiploic appendagitis is a self-limiting disease involving inflammation of the epiploic appendages.
  - Most commonly associated with the fifth decade of life, obesity, women, and the sigmoid colon.

- Management is conservative with analgesics and resolution typically occurs between one and four weeks.
  - Surgical ligation may be indicated if the condition fails to resolve with conservative management or if the condition becomes recurrent.

- Management of secondary epiploic appendagitis requires treatment of the inciting complication.
References:


