

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

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

Procedure	Appropriateness Category	Relative Radiation Level
CT abdomen and pelvis with IV contrast	Usually Appropriate	⊕⊕⊕⊕
CT abdomen and pelvis without IV contrast	Usually Appropriate	⊕⊕⊕⊕
MRI abdomen and pelvis without and with IV contrast	Usually Appropriate	0
US abdomen	May Be Appropriate	0
MRI abdomen and pelvis without IV contrast	May Be Appropriate	0
CT abdomen and pelvis without and with IV contrast	May Be Appropriate	⊕⊕⊕⊕
X-ray abdomen	May Be Appropriate	⊕⊕
FDG-PET/CT skull base to mid-thigh	Usually Not Appropriate	⊕⊕⊕⊕
In-111 WBC scan abdomen and pelvis	Usually Not Appropriate	⊕⊕⊕⊕
Tc-99m cholescintigraphy	Usually Not Appropriate	⊕⊕
Tc-99m WBC scan abdomen and pelvis	Usually Not Appropriate	⊕⊕⊕⊕
X-ray upper GI series with small bowel follow-through	Usually Not Appropriate	⊕⊕⊕
X-ray contrast enema	Usually Not Appropriate	⊕⊕⊕

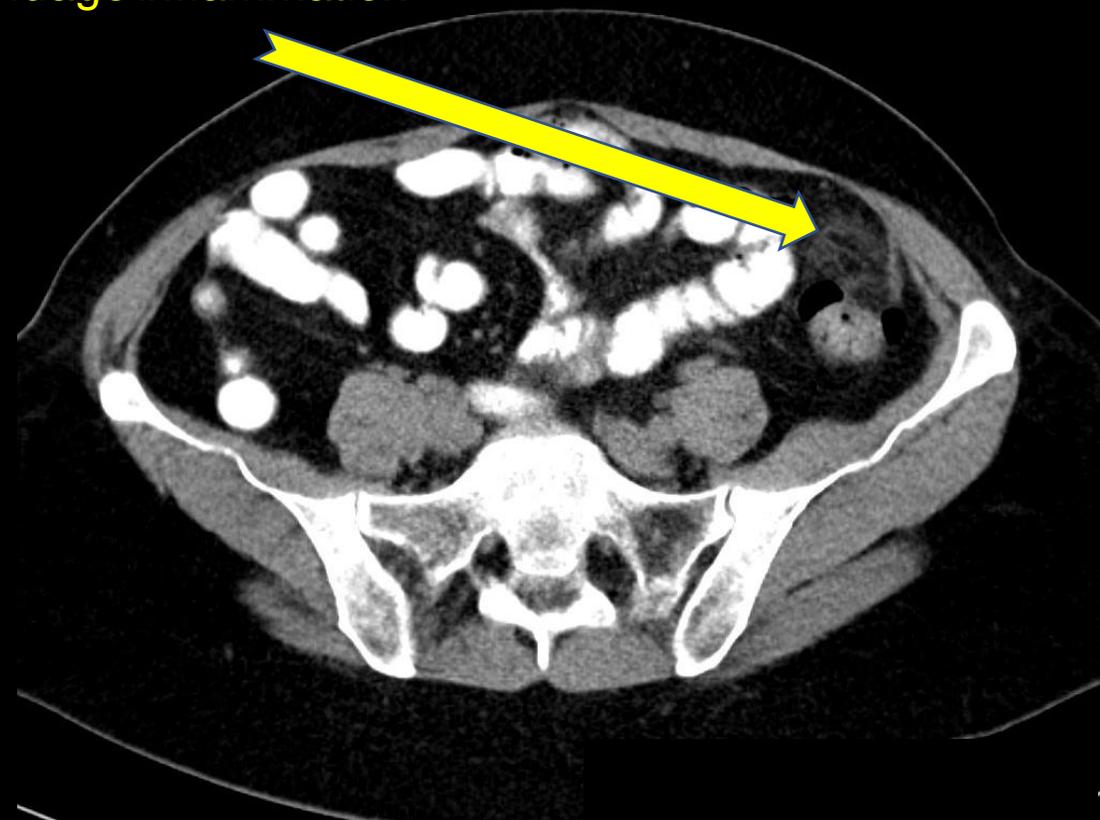
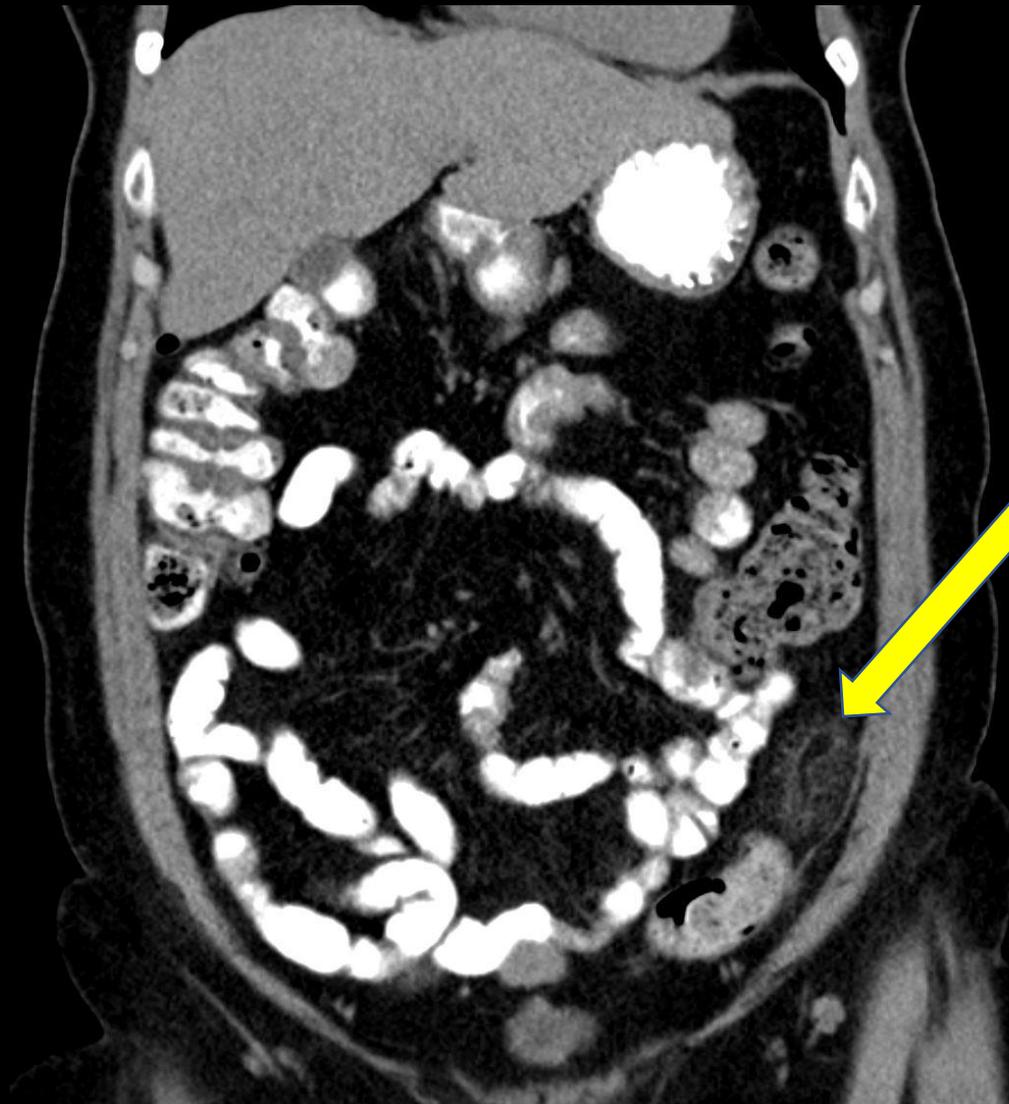
This imaging modality was ordered by the ER physician

Findings: (unlabeled)



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:

- ACR Appropriateness Criteria. Acute Nonlocalized Abdominal Pain, Variant 4.
<https://acsearch.acr.org/docs/69467/Narrative/>
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