AMSER Case of the Month July 2022

68-year-old male with left lower quadrant abdominal pain

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Patient Presentation

- HPI
  - 68-year-old male presents to ED with left lower quadrant abdominal pain for 3 to 4 days
  - Complains of moderate, non-radiating, dull, constant pain that is worse with ambulation
  - Was seen in ED 1 week ago for chest pain, had negative cardiac workup at that time and chest pain has since resolved
- Past medical history
  - CAD s/p stents, HTN, CKD, hernia repair
- Medications
  - Aspirin, lisinopril, metoprolol, levothyroxine, rosuvastatin
- Physical Exam & Labs
  - Vitals stable, left lower quadrant tenderness to palpation without rebound or guarding
  - No significant lab findings

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What imaging should we order?

Select the applicable ACR Appropriateness Criteria

Variant 1: **Left lower quadrant pain. Suspected diverticulitis. Initial imaging.**

Procedure	Appropriateness Category	Relative Radiation Level
CT abdomen and pelvis with IV contrast	Usually Appropriate	☢☢☢
CT abdomen and pelvis without IV contrast	May Be Appropriate	☢☢☢
MRI abdomen and pelvis without and with IV contrast	May Be Appropriate	O
MRI abdomen and pelvis without IV contrast	May Be Appropriate	O
US abdomen transabdominal	May Be Appropriate	O
CT abdomen and pelvis without and with IV contrast	Usually Not Appropriate	☢☢☢☢
Fluoroscopy contrast enema	Usually Not Appropriate	☢☢☢
Radiography abdomen and pelvis	Usually Not Appropriate	☢☢☢
US pelvis transvaginal	Usually Not Appropriate	O

This imaging modality was ordered by ED physician

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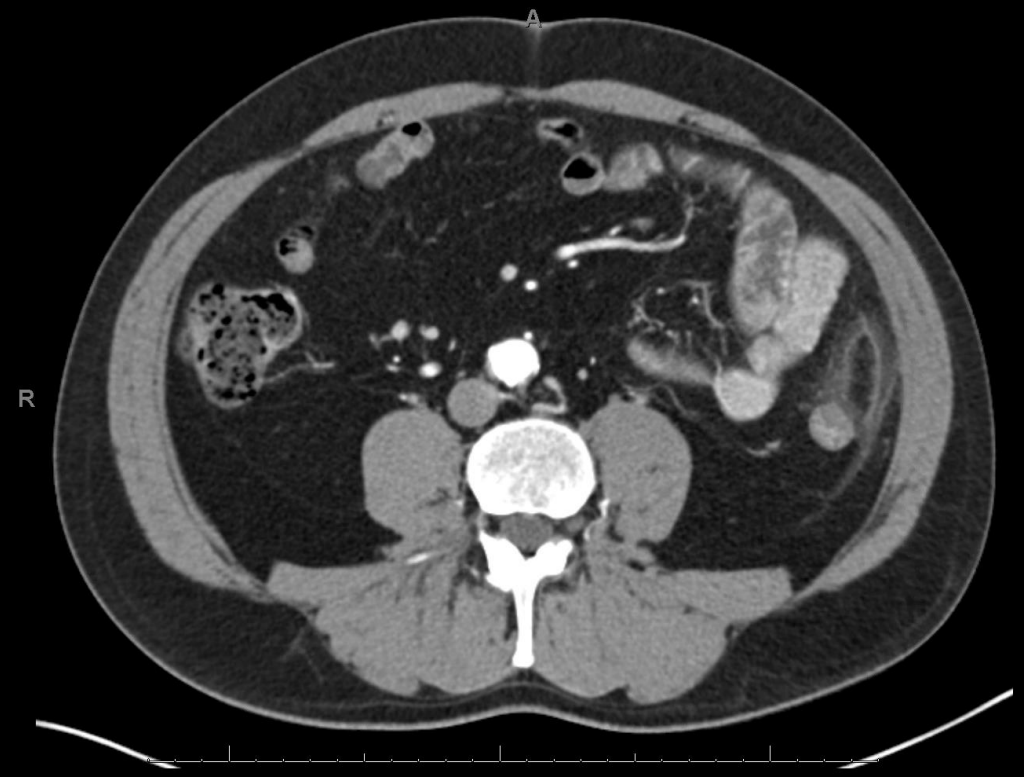
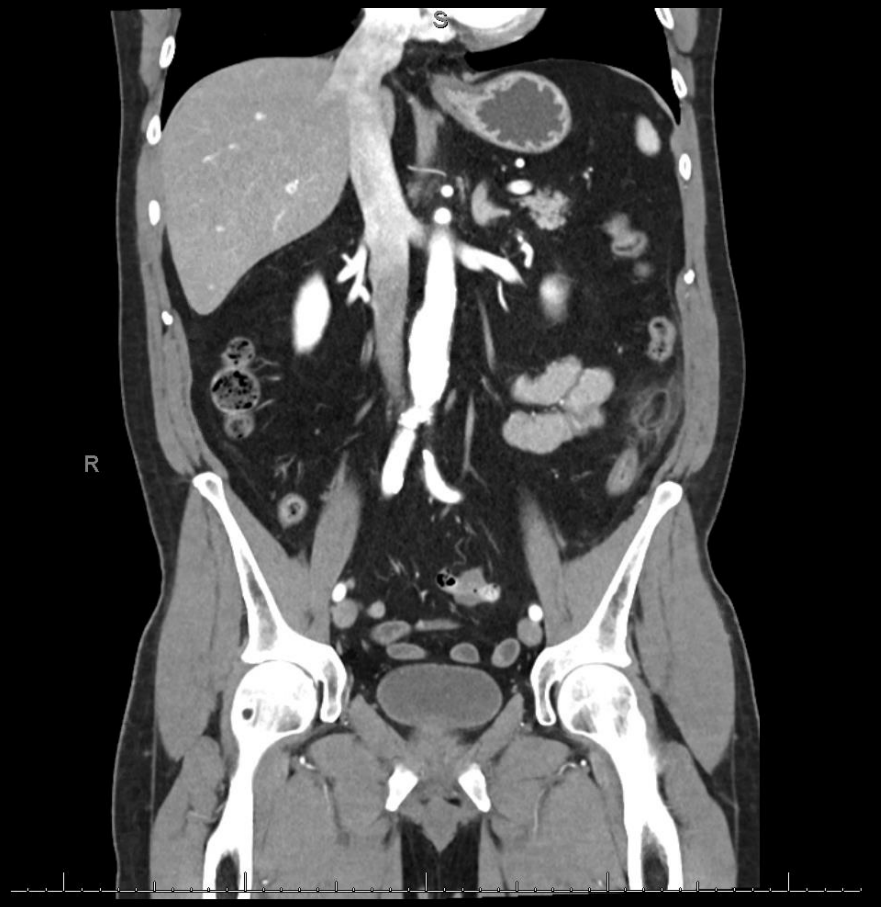
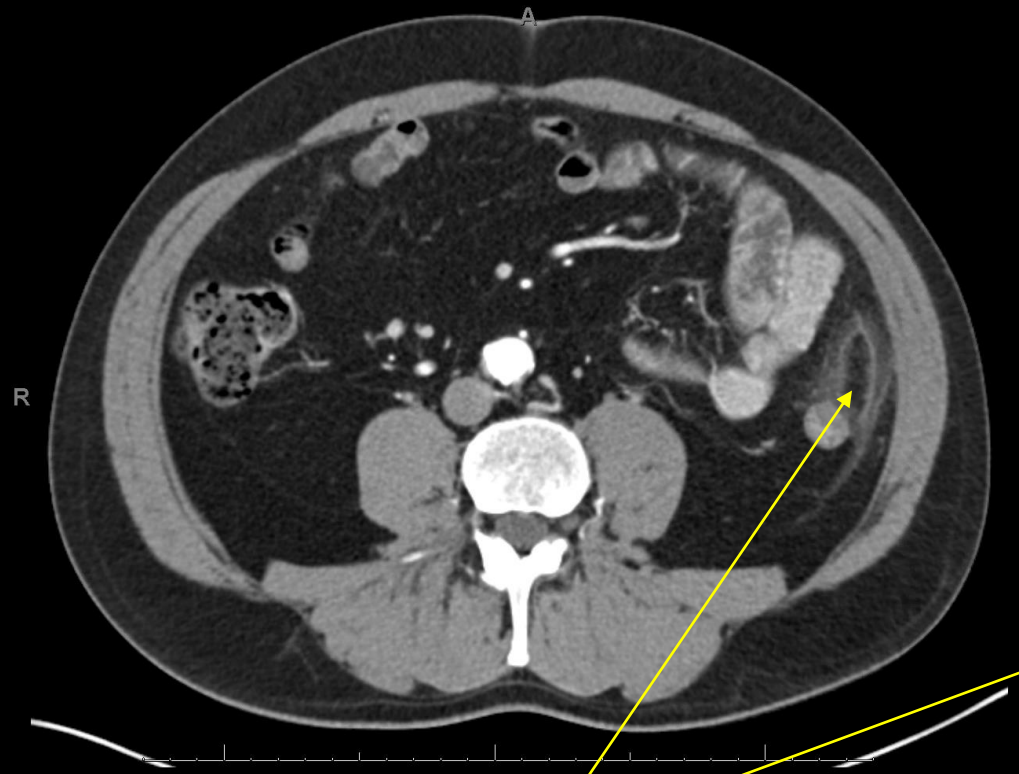
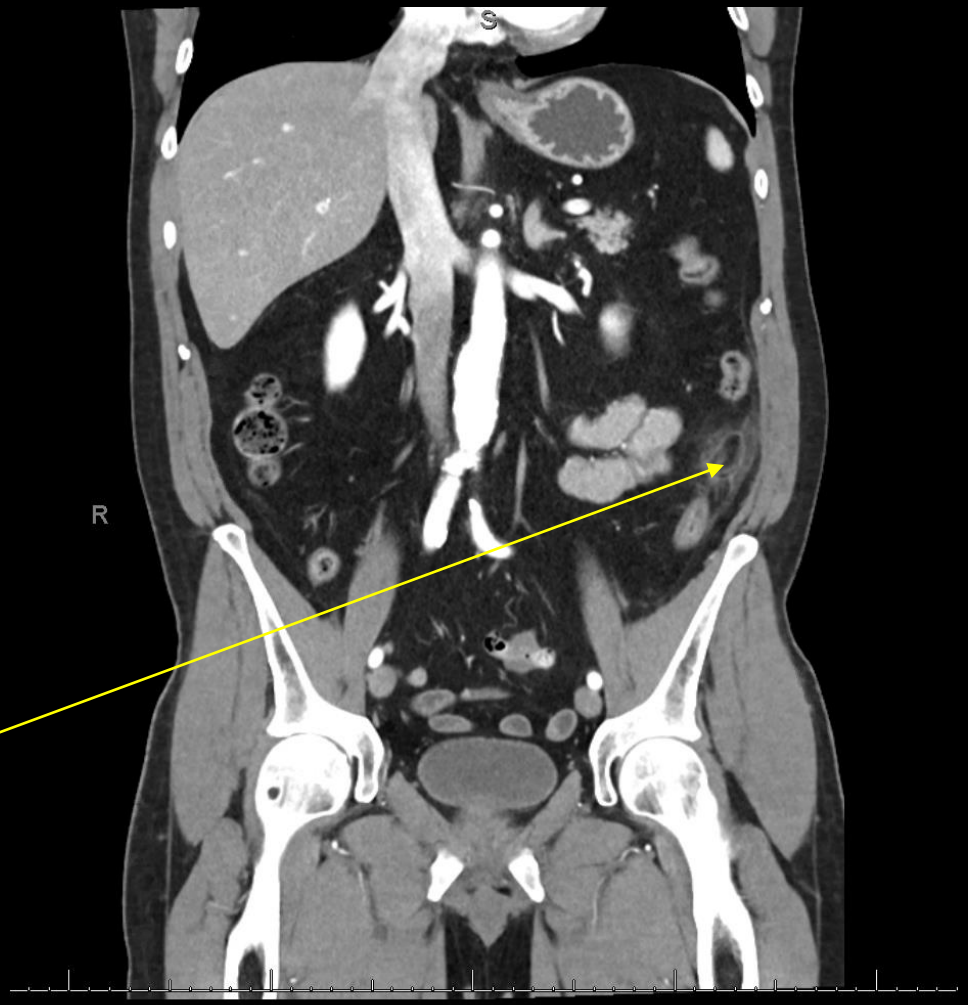
Findings (Unlabeled)





Findings (Labeled)





Fat containing mass with surrounding stranding adjacent to the descending colon, approximately 30mm

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Final Diagnosis

Epiploic appendagitis

Discussion: Background

- Epiploic appendages are normal outpouchings of peritoneal fat on the colonic surface. Epiploic appendagitis is the ischemic infarction of an epiploic appendage caused by torsion or spontaneous thrombosis

- Acute diverticulitis and appendicitis make up the differential diagnosis of epiploic appendagitis. In fact, epiploic appendagitis is reported in 2-7% of patients initially suspected of having acute diverticulitis and 0.3-1% of patients suspected of having acute appendicitis.

- Mean age of diagnosis is 40 years with 4x higher incidence in men compared to women

- Epiploic appendagitis can arise in any segment of the colon, but most common in the rectosigmoid colon

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Discussion: Clinical Presentation and Treatment

- Clinical Presentation
  - Epiploic appendagitis most commonly present with acute or subacute onset of lower abdominal pain, 60-80% of patients report left sided pain
  - Physical exam localizes pain to affected area, otherwise patients are usually non-toxic appearing, afebrile, without peritoneal signs
  - Other less common symptoms may include vomiting, bloating, diarrhea, and low-grade fever

- Usual Treatment
  - Can be managed conservatively with oral anti-inflammatory medications (NSAIDS, acetaminophen) for 4-7 days, usually does not require hospitalization or antibiotics
  - If conservative management fails or symptoms worsen, surgery should be performed

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Discussion: Our Patient's Course

- Patient was discharged in stable condition with instructions to take NSAIDs for 5 days then follow-up with his PCP and to return to the ED if symptoms worsened

References

1. Galgano SJ, McNamara MM, Peterson CM, et al. ACR Appropriateness Criteria® Left Lower Quadrant Pain-Suspected Diverticulitis. *Journal of the American College of Radiology*. 2019;16(5):S141-S149. doi:10.1016/j.jacr.2019.02.015

2. 2. Singh AK, Gervais DA, Hahn PF, Sagar P, Mueller PR, Novelline RA. Acute Epiploic Appendagitis and Its Mimics. *RadioGraphics*. 2005;25(6):1521-1534. doi:10.1148/rg.256055030