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.**

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	O
US abdomen	May Be Appropriate	O
MRI abdomen and pelvis without IV contrast	May Be Appropriate	O
CT abdomen and pelvis without and with IV contrast	May Be Appropriate	☢☢☢☢
Radiography 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	☢☢☢☢
Fluoroscopy upper GI series with small bowel follow-through	Usually Not Appropriate	☢☢☢
Fluoroscopy contrast enema	Usually Not Appropriate	☢☢☢

This imaging modality was ordered by the ER physician

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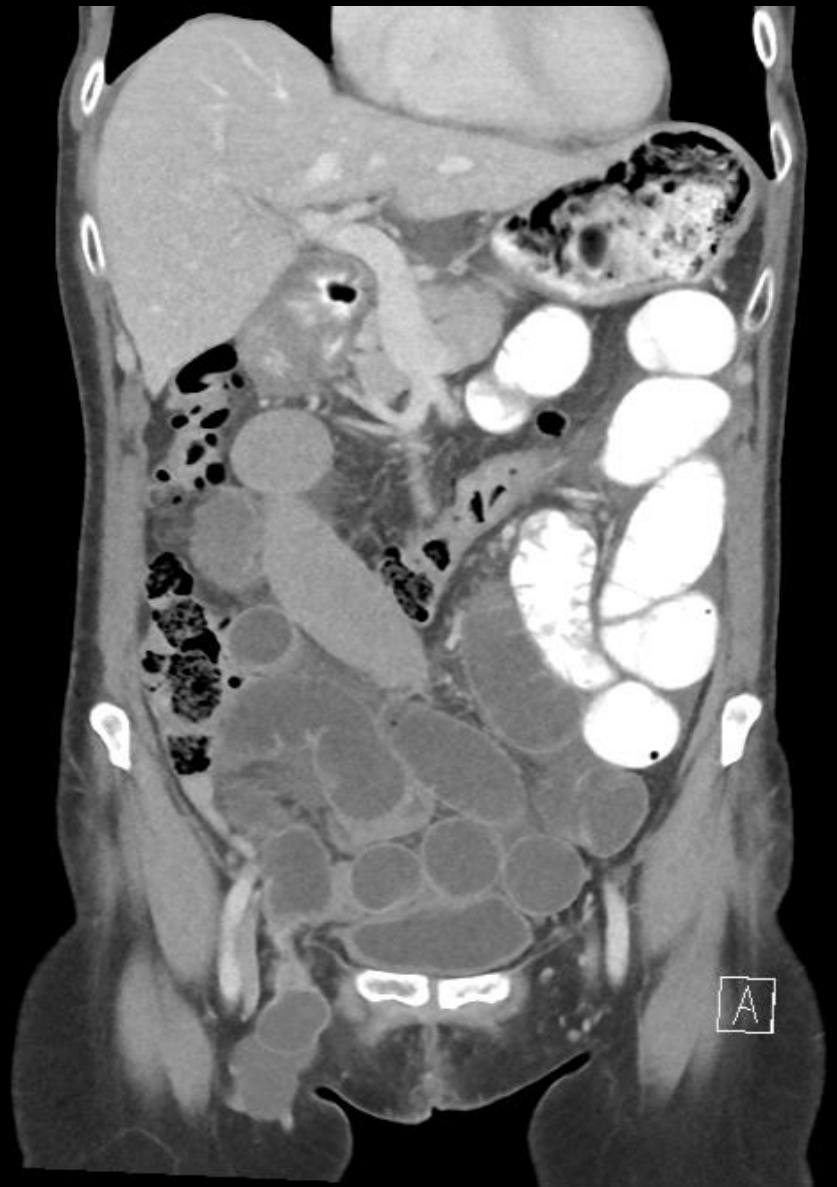
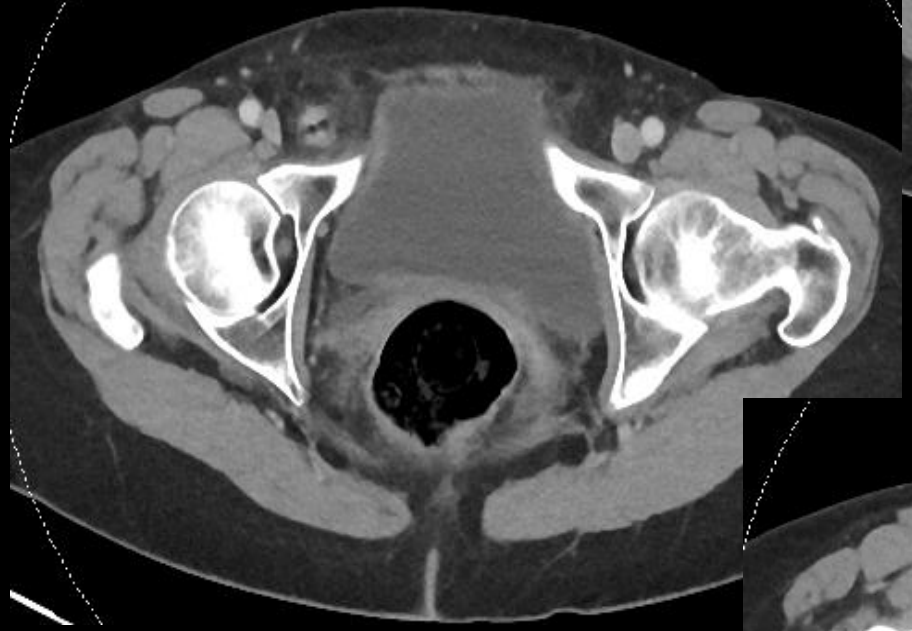
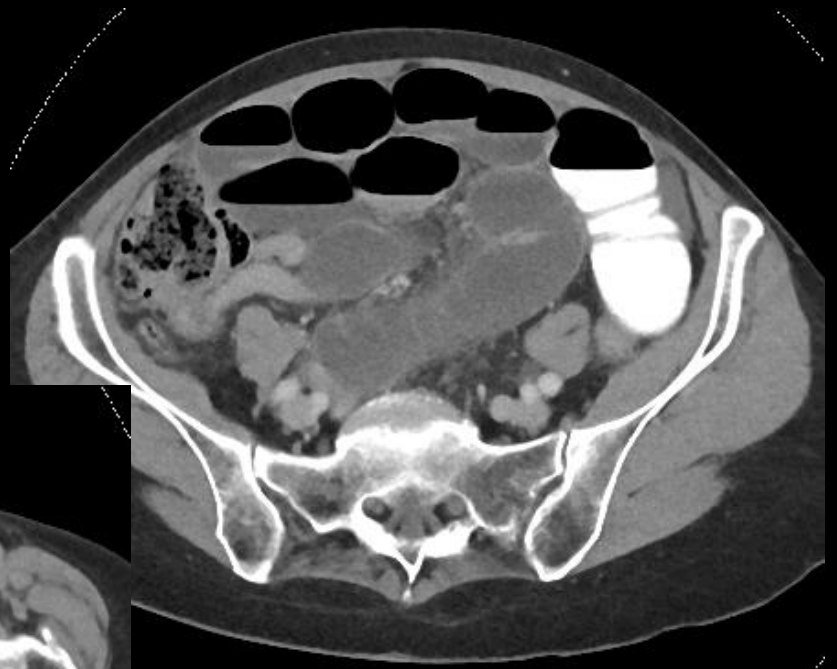
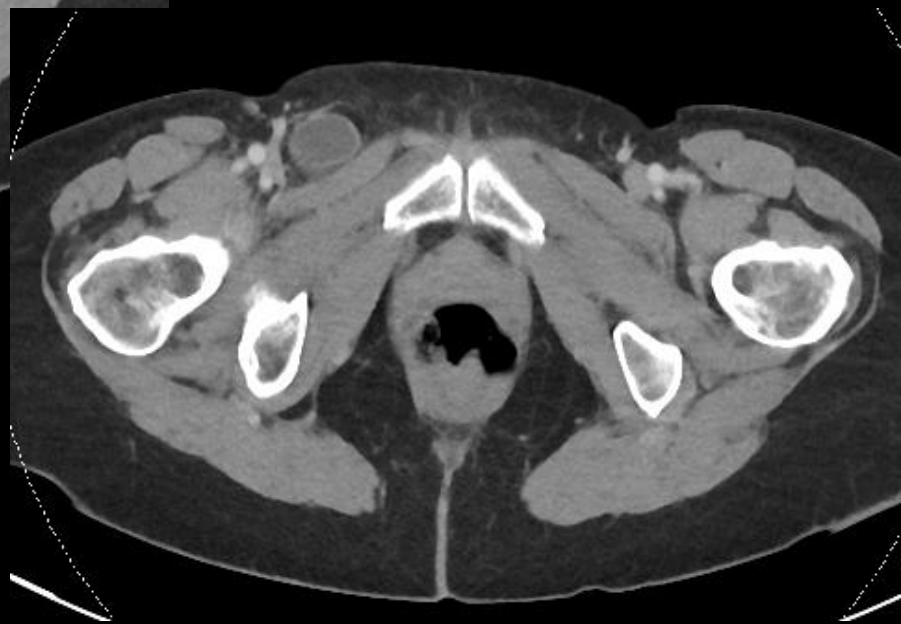
Findings: (unlabeled)









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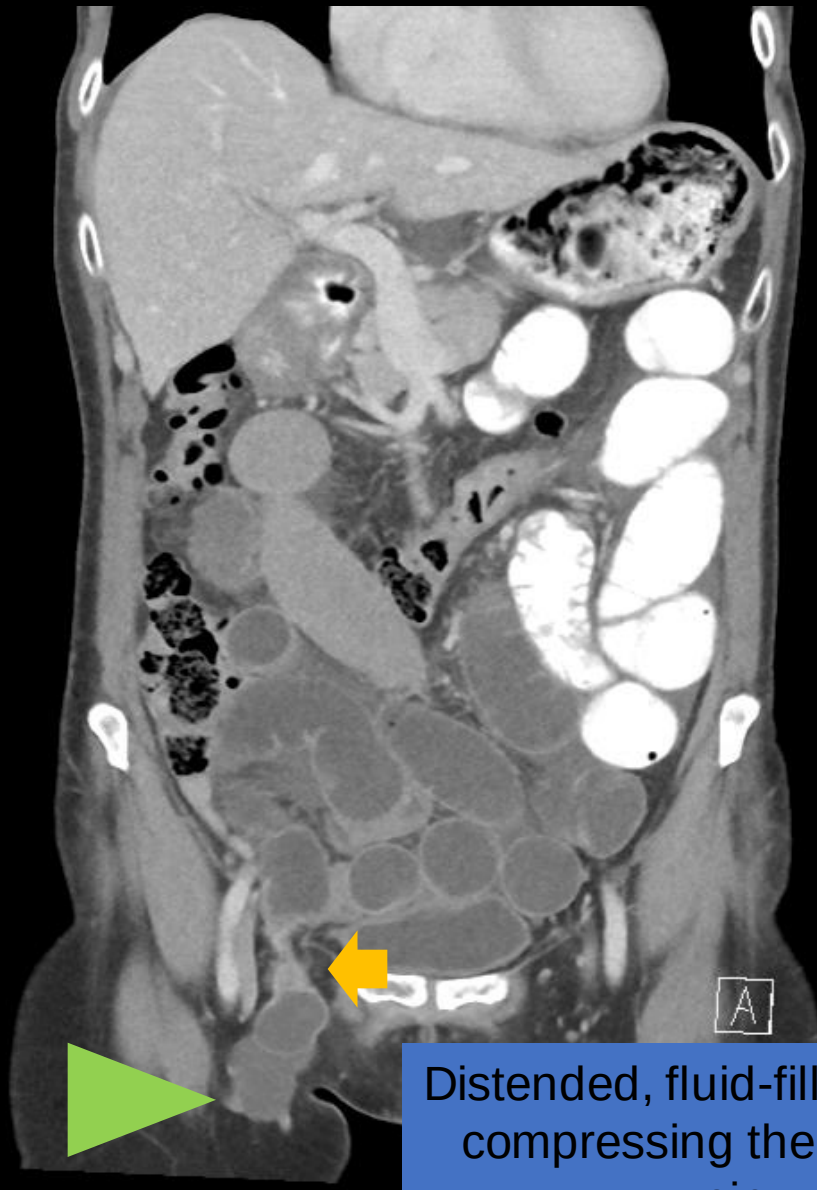
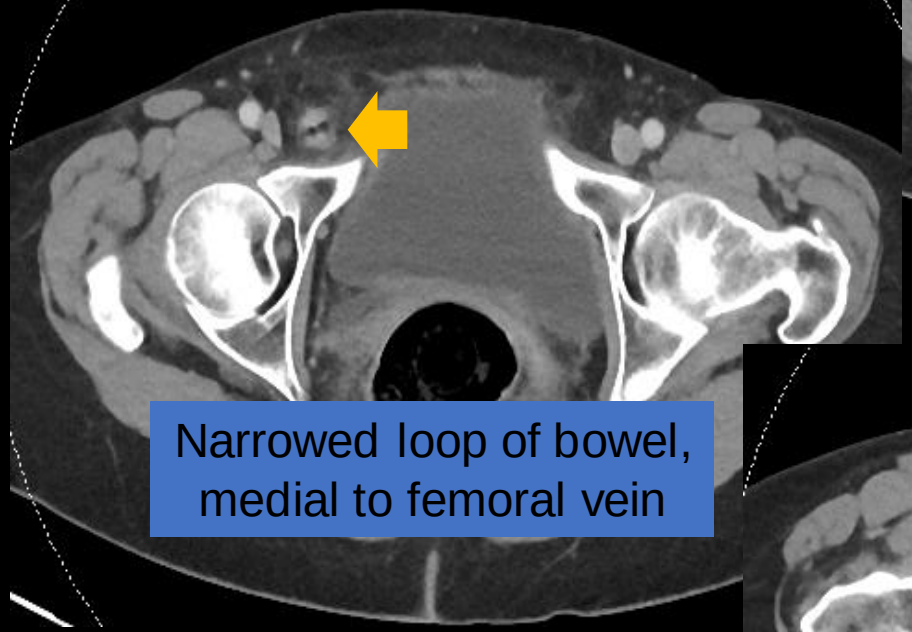
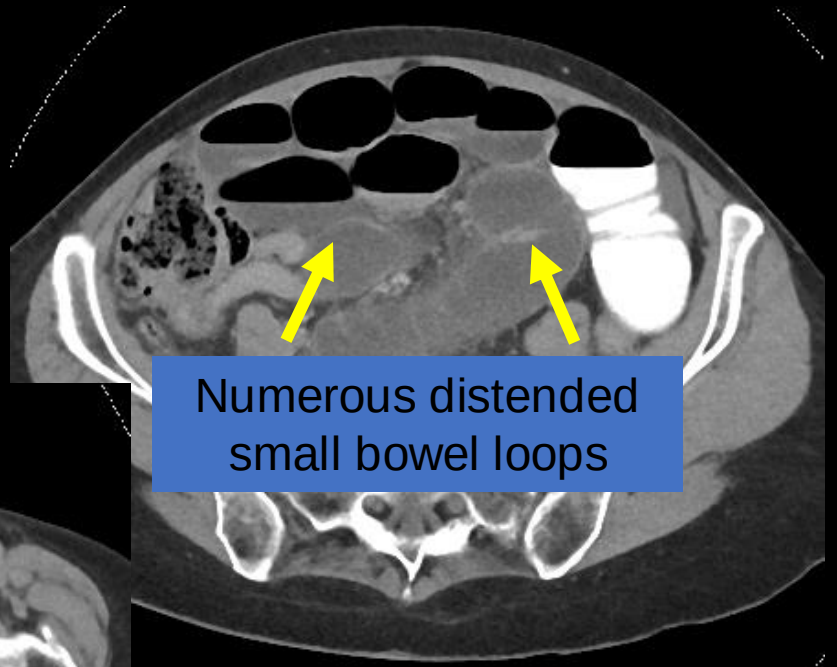


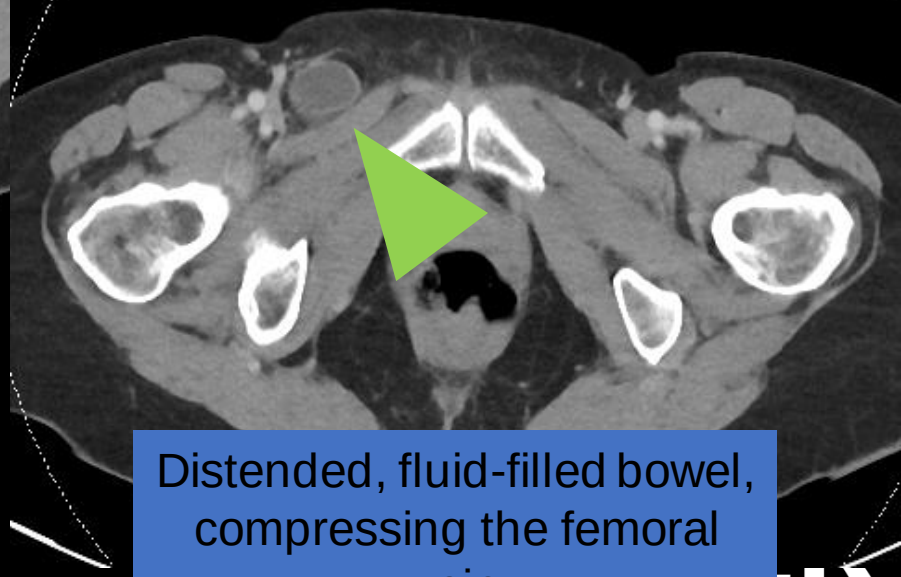
Distended, fluid-filled bowel, compressing the femoral vein



Narrowed loop of bowel, medial to femoral vein



Numerous distended small bowel loops

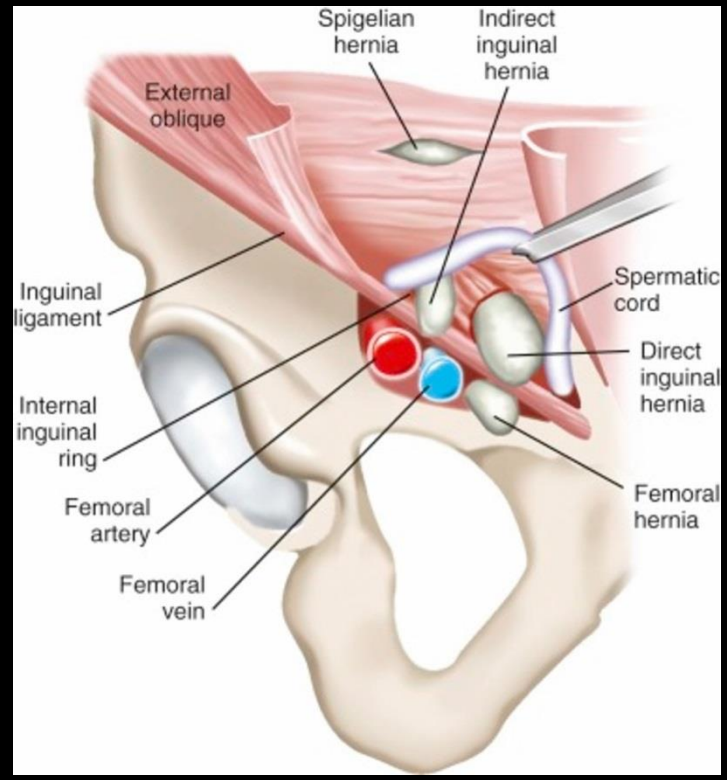


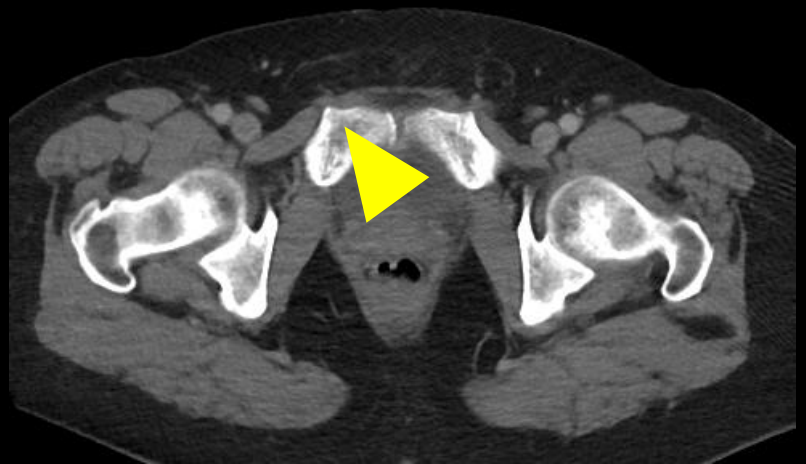
Distended, fluid-filled bowel, compressing the femoral vein

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.





Case Discussion

- 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.

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