Case Presentation: 57 Year Old Woman with Abdominal Pain

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History of Present Illness

57 year old woman presents to the ED with abdominal pain and nausea. She was not appropriately responding, so history was attained from the patient's daughter and medical record.

Abdominal pain that has been on and off for the last year. In this past week the pain has gotten worse and includes nausea. No episodes of vomiting. Positive for anorexia. Pt has also been "out of it" and disoriented.

Per daughter at baseline the patient is very aware and oriented. She lives with her significant other. She does not walk and she wears a diaper.

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Additional History

PMH of

- Gastric bypass surgery that was complicated by sepsis secondary to gastric remnant perforation
- Enterocutaneous Fistula
- Bipolar I Disorder
- Seizures
- Uterine Cancer
- Untreated Hepatitis C

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Examination and Initial Work-Up

150/90 110 Afebrile 20 95% on Room Air

Patient appeared cachectic and chronically ill, she was alert and confused.

PE notable for tachycardia, 2+ pitting edema in lower extremities up to knees. Ostomy bag present.

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Lab Results

WBC – 10.2 RBC – 4.28 PLT - 237

BMP:

- BUN – 9
- Cl – 105
- CO2 – 18
- Cr – 0.7
- K – 4.3
- Na – 135
- Lactic acid – 2.8

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Urinalysis and Urine Culture

WBC - 0-2

RBC – 4-7

Epithelial cells – occasional

Bacteria – 4+

Culture positive for E. Coli ESBL

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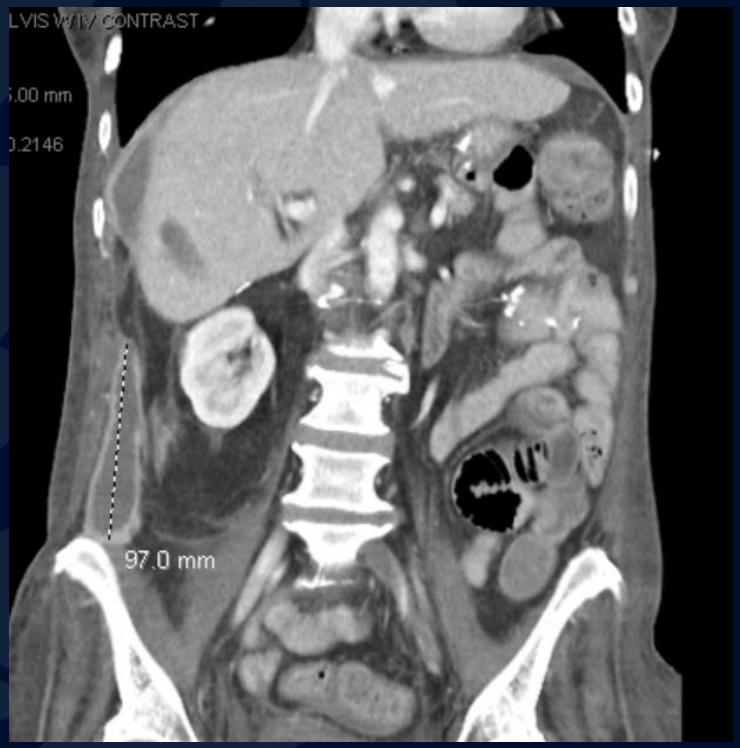
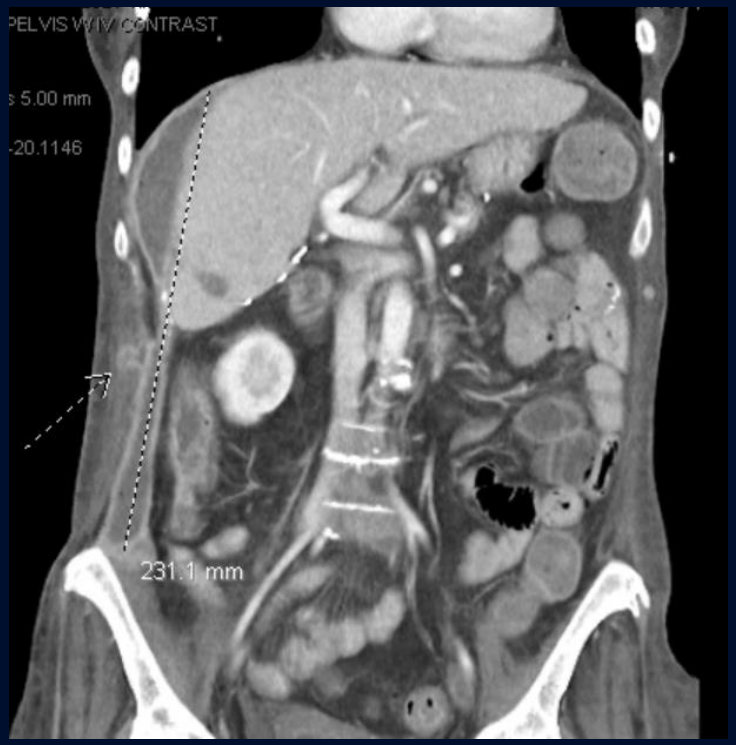
CT of the Abdomen and Pelvis





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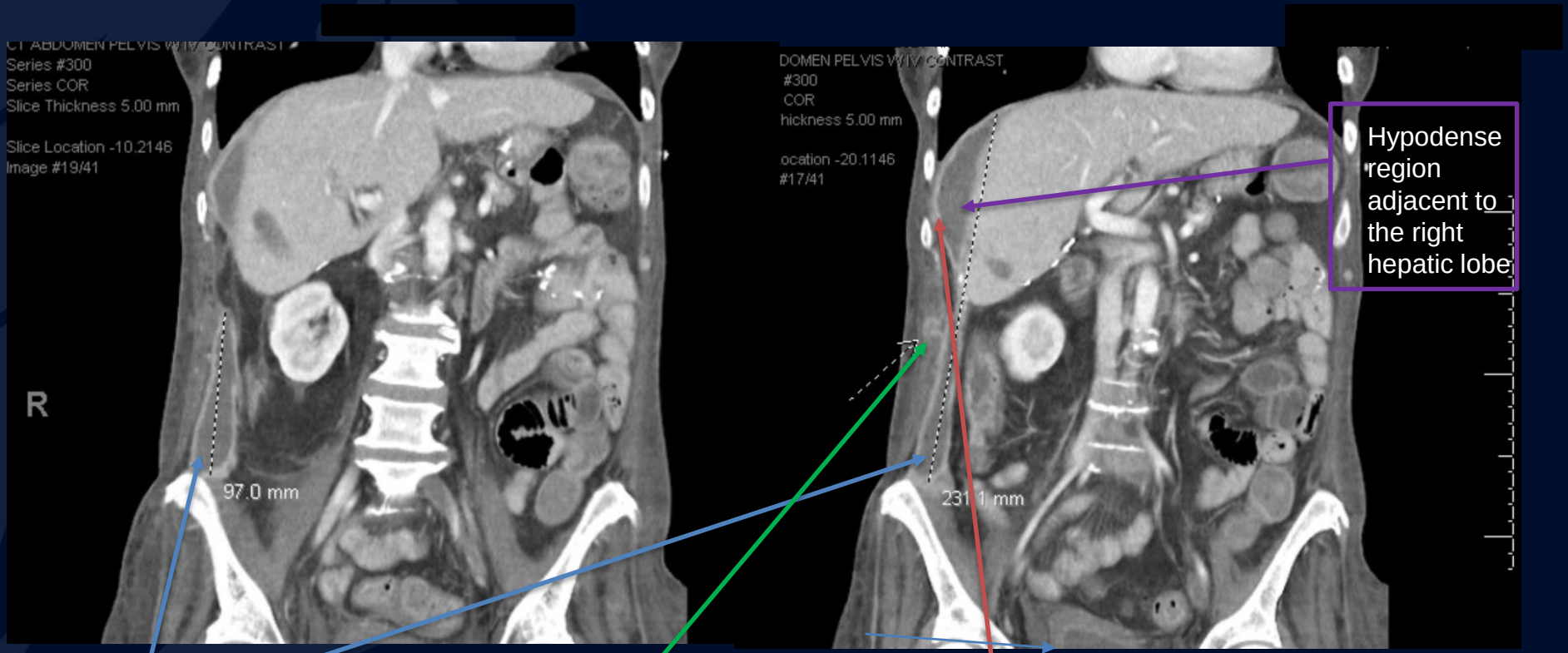
CT of the Abdomen and Pelvis



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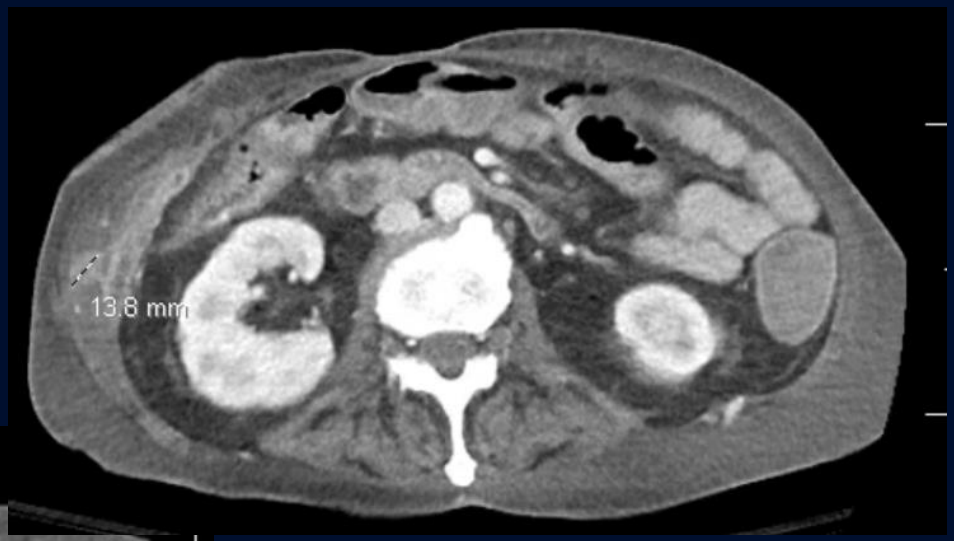

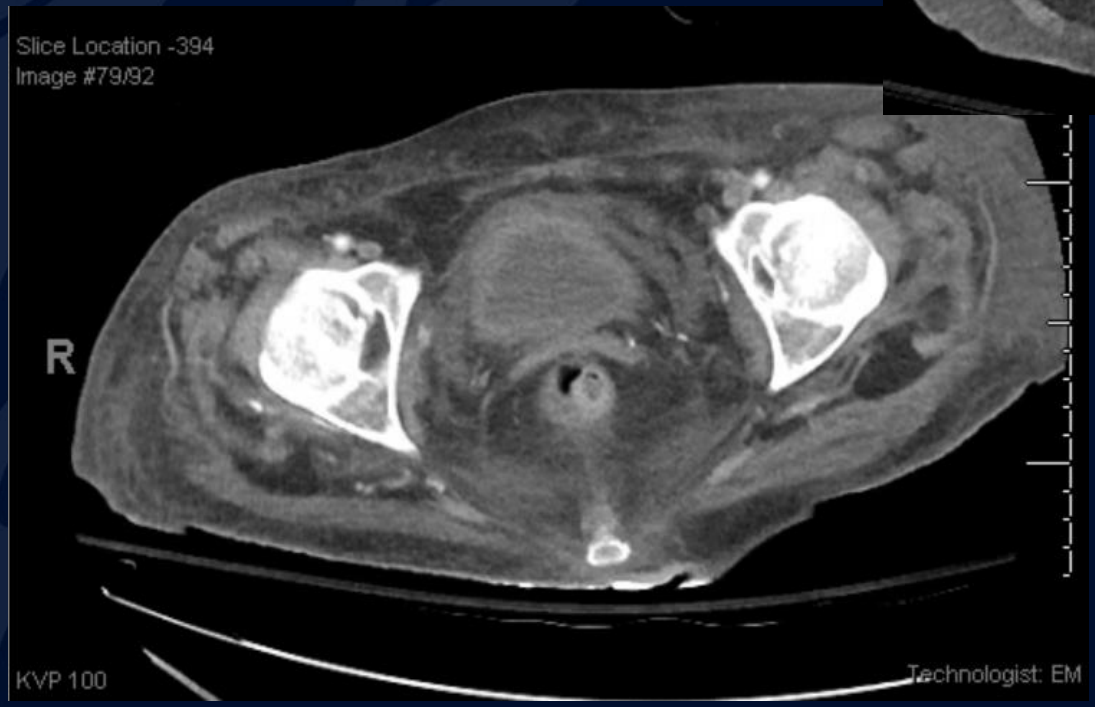

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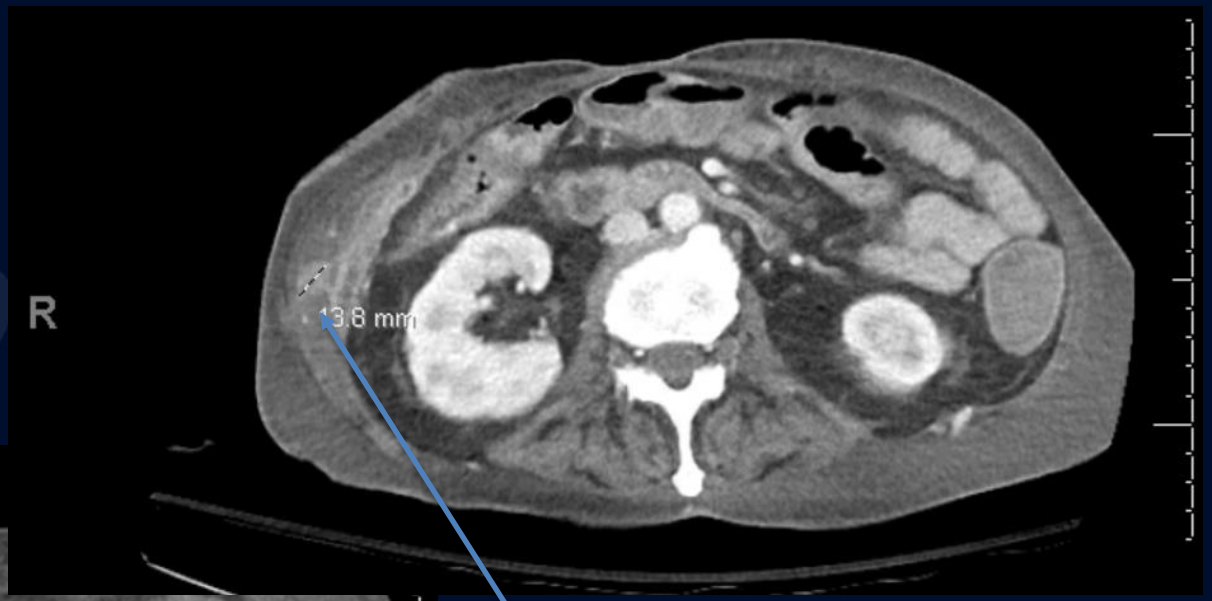
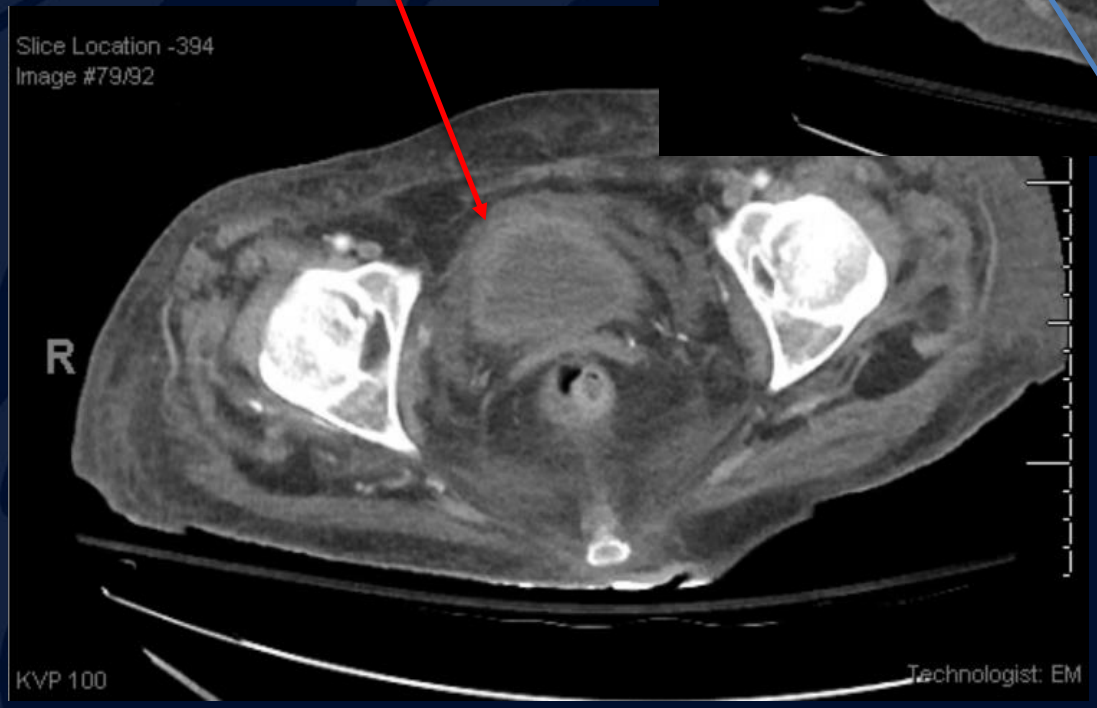


Thickened urinary bladder wall



Inflammation within the abdominal wall

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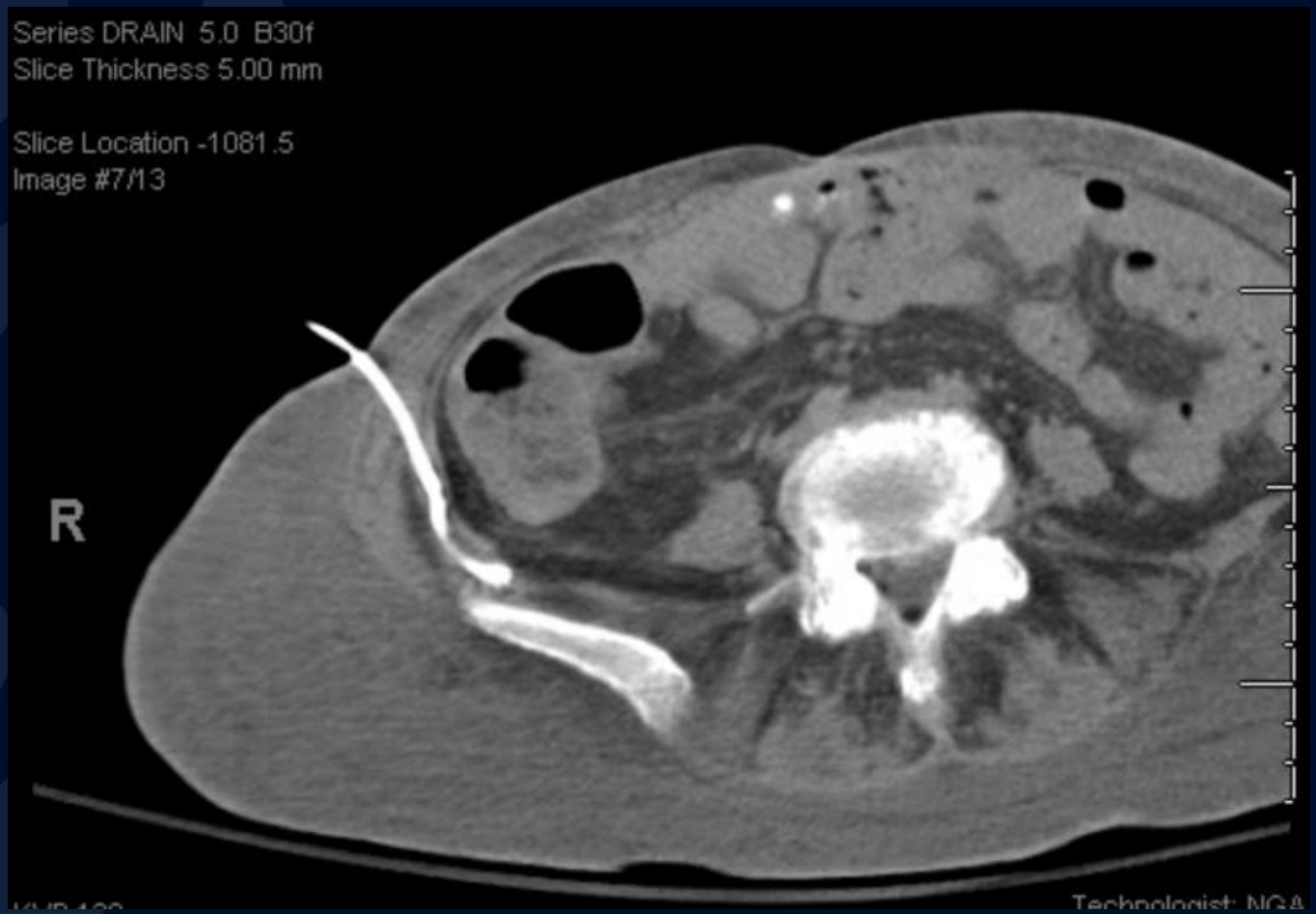
CT Guided Drain



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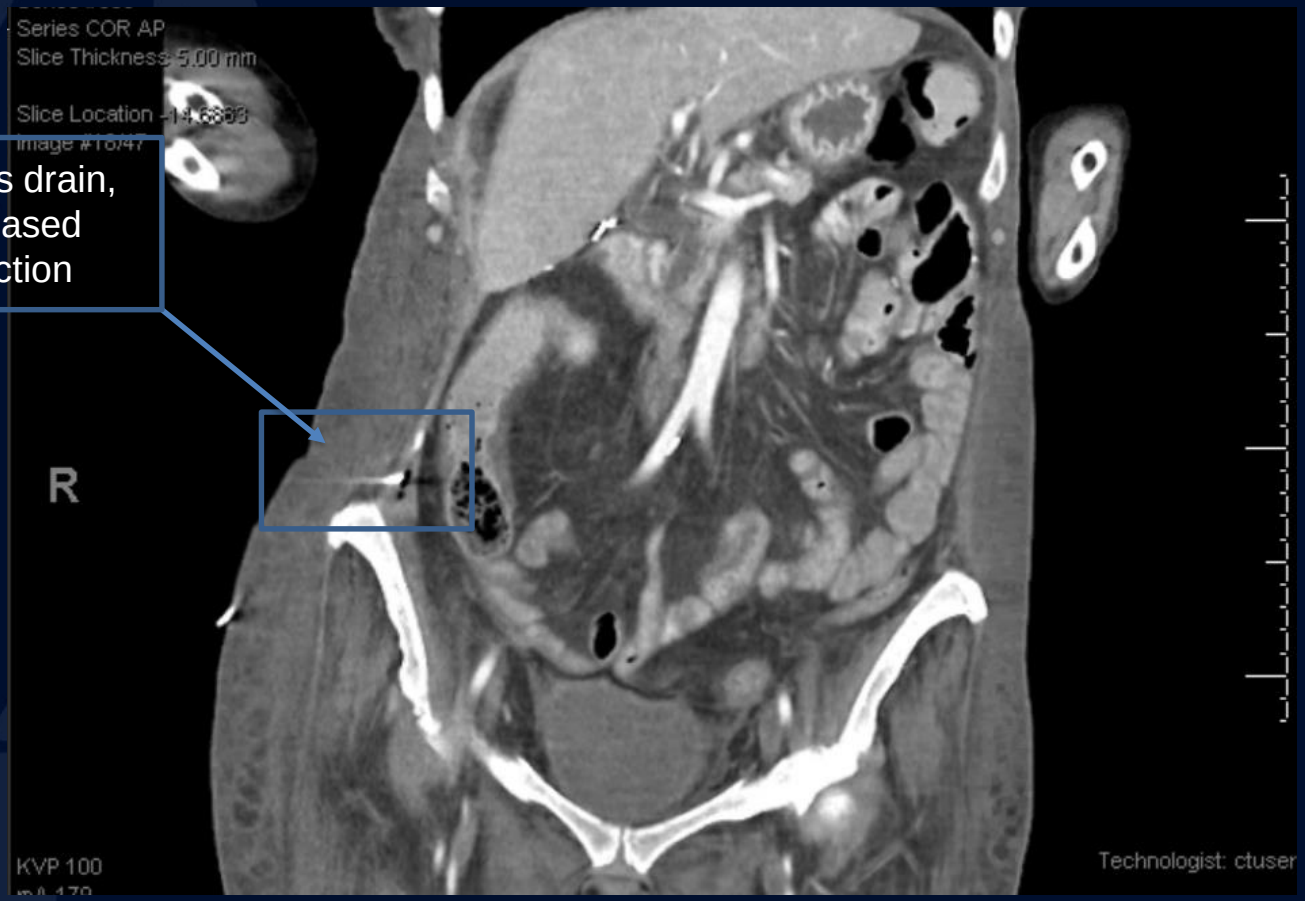
Post Drain CT of the Abdomen and Pelvis



Abscess drain, decreased collection

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Differential Diagnosis

The etiology for the patient's symptoms of altered mental status, abdominal pain, and nausea / vomiting:

1. Abdominal abscess formation
2. Urinary tract infection
3. Cirrhosis of liver with ascites

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Differential Diagnosis: Abdominal Abscess

- Symptoms – abdominal pain, nausea / vomiting
- Imaging: CT abd / pelv – phlegmonous collection within the right abdominal wall subcutaneous tissue
- History of gastric bypass with complications and enterocutaneous fistula
- Physical exam – cachetic, tachycardia, chronically ill

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Differential Diagnosis: Urinary Tract Infection

- Symptoms – altered mental status
  - No dysuria or frequency
- Imaging: CT abd / pelv – urinary bladder wall thickening
- Labs: UA and urine culture – white count, positive culture - consistent with UTI

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Differential Diagnosis: Cirrhosis

- Symptoms – abdominal pain, nausea/vomiting, altered mental status
  - Acute symptom changes vs chronic disease
- CT abd / pelv – perihepatic fluid, right subscapular perihepatic abscess
- History of Untreated hepatitis C
- Physical exam - anasarca and cachexia

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Diagnosis?

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Diagnosis:
Intra Abdominal Abscess

- Based on the imaging of the phlegmonous fluid collection surrounded with peripheral enhancement resolved with drain placement there was most likely an intra-abdominal abscess.
- Abscesses can be confined or generalized within peritoneal cavity
  - Systemic symptom of septic shock such as leukocytosis and fever did not set in because of the contained nature of this abscess.
  - Concern for progression if not treated.
  - Bacteria cause inflammatory reaction causing hypertonic environment → increase in size of abscess cavity
- Blood cultures are also typically negative such as this case.

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Typical Presentation

- Can present with abdominal pain, fever, anorexia, tachycardia, or prolonged ileus
- Palpable mass may or may not be present
- If delayed treatment/presentation → septic shock
- Post surgery patients – masked symptoms due to analgesia and antibiotics
- Dehydration, oliguria, tachycardia, tachypnea, and respiratory alkalosis are common

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Source of Abscess

- Most likely due to fistulae from prior abdominal surgery (gastric bypass, cholecystectomy, etc)
  - History of enterocutaneous fistula
- UTI as potential source – more likely to cause perinephric or renal abscess

Typical Sources

- 70% of intra abdominal abscesses are postsurgical
- 13% of are hepatic abscesses within the right lobe
- Most often due to gastrointestinal source, less likely due to gynecologic or urinary source

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Treatment

- CT guided drainage – avoid anesthesia and wound complications and can prevent contamination of other abdominal cavity parts.
  - Drainage culture showed multi organisms gram negative rods, yeast
- IV antibiotics
  - Piperacillin + Tazobactam and Fluconazole were given to this patient

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References

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