AMSER Case of the Month October 2020

32-year-old male with acute abdominal pain and fever

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Patient Presentation

- HPI: 32-year-old male with history of ulcerative colitis, rectal adenocarcinoma, and multiple complicated surgeries with new onset abdominal pain, distension and fever.
- PMHx: s/p laparotomy, J-pouch excision, revision of loop ileostomy to end ileostomy, and anal sphincter excision (approx. 2 weeks prior).
- Medications: acetaminophen, gabapentin, Robaxin, Zosyn, sertraline
- Vitals: BP 126/81, HR 118, SpO2 98% on RA, T 38.7 C
- Relevant labs:
  - BMP: wnl
  - CBC: WBC 18, Hgb 7.1, plt 447

What Imaging Should We Order?

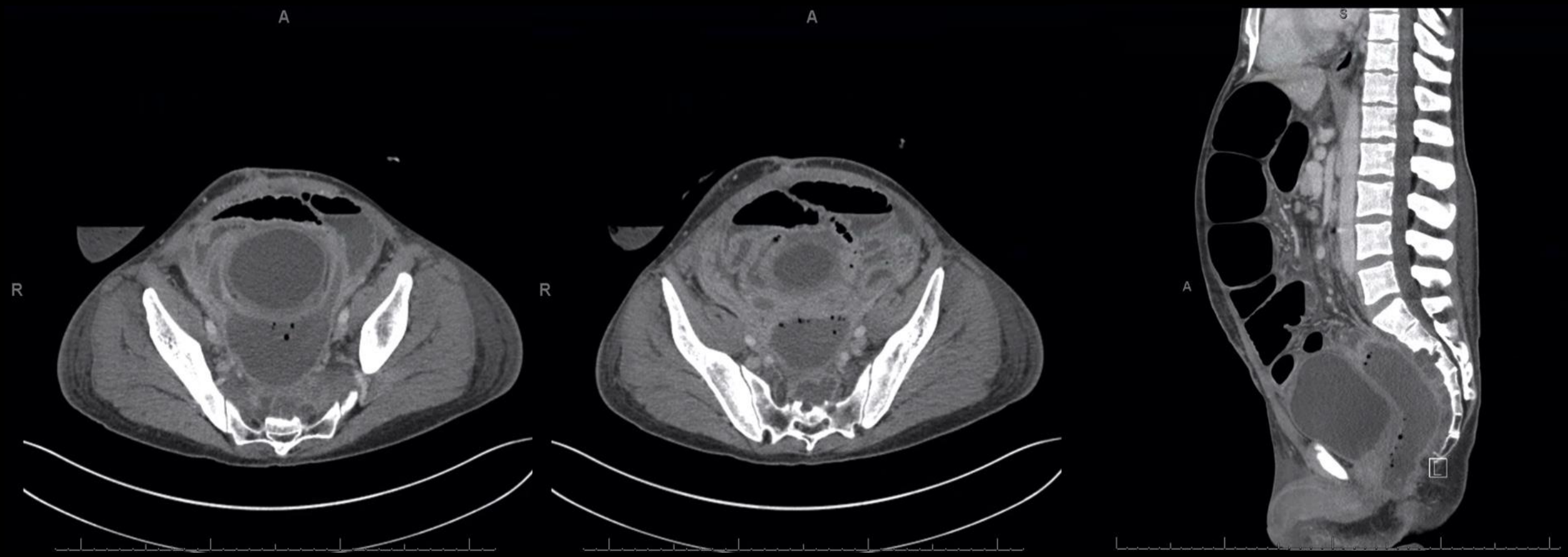
ACR Appropriateness Criteria

Variant 2: **Acute nonlocalized abdominal pain and fever. Postoperative patient. Initial imaging.**

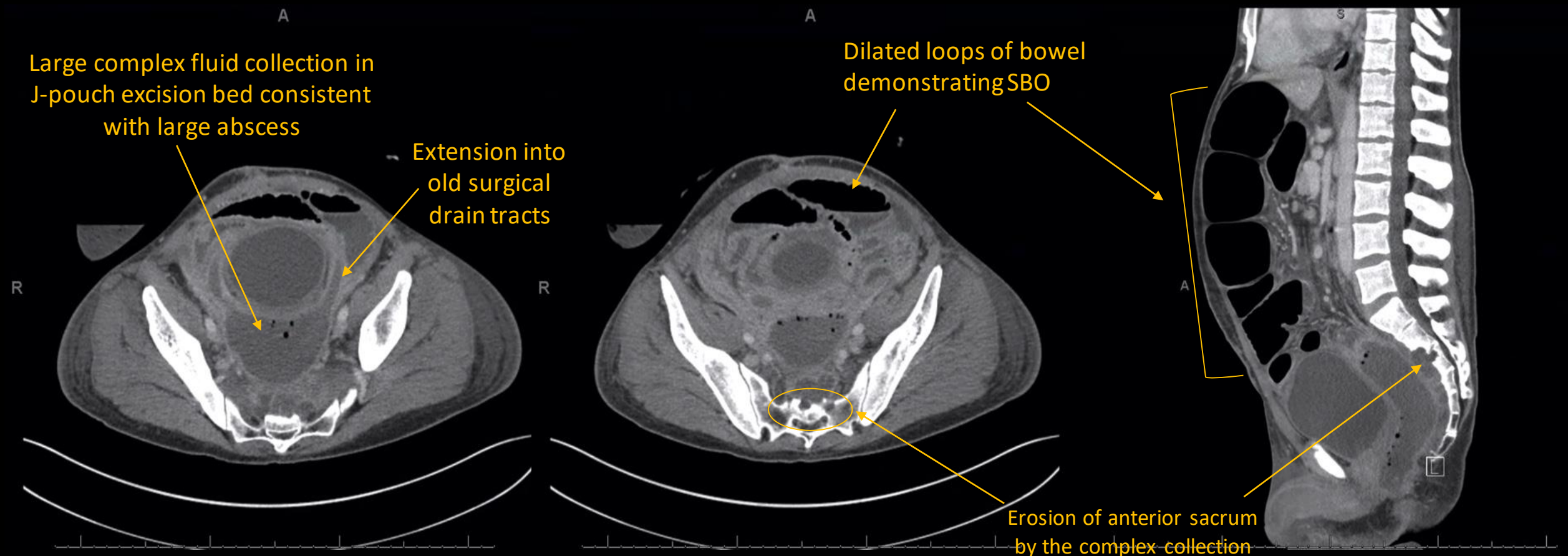
Procedure	Appropriateness Category	Relative Radiation Level
CT abdomen and pelvis with IV contrast	Usually Appropriate	☢☢☢
MRI abdomen and pelvis without and with IV contrast	May Be Appropriate	O
US abdomen	May Be Appropriate	O
CT abdomen and pelvis without IV contrast	May Be Appropriate	☢☢☢
MRI abdomen 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	☢☢
Fluoroscopy contrast enema	May Be Appropriate	☢☢☢
Fluoroscopy upper GI series with small bowel follow-through	May Be Appropriate	☢☢☢
FDG-PET/CT skull base to mid-thigh	Usually Not Appropriate	☢☢☢☢
WBC scan abdomen and pelvis	Usually Not Appropriate	☢☢☢☢
Nuclear medicine scan gallbladder	Usually Not Appropriate	☢☢

CT A/P w/ contrast completed.

CT Findings: Unlabeled



CT Findings: Labeled



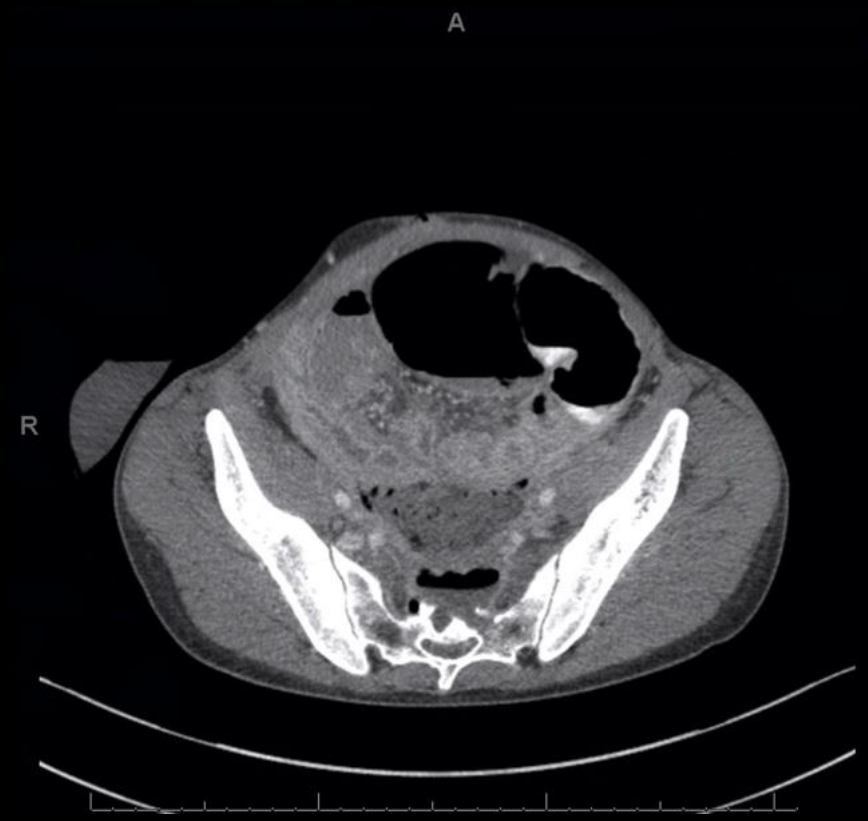
*Patient subsequently underwent CT-guided pelvic fluid collection drainage with placement of pigtail drainage catheter + IV abx.

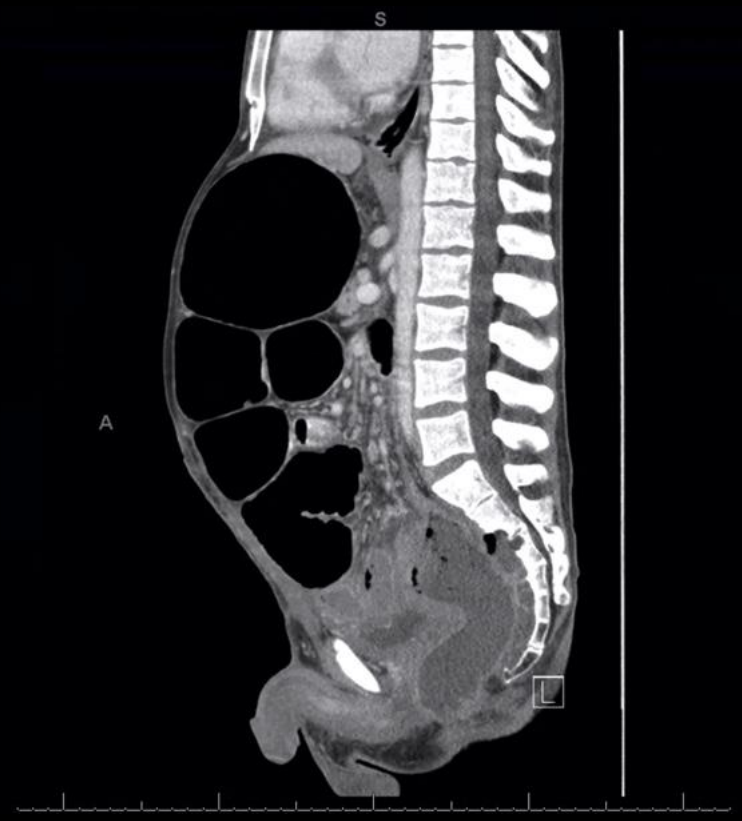
Final diagnosis:

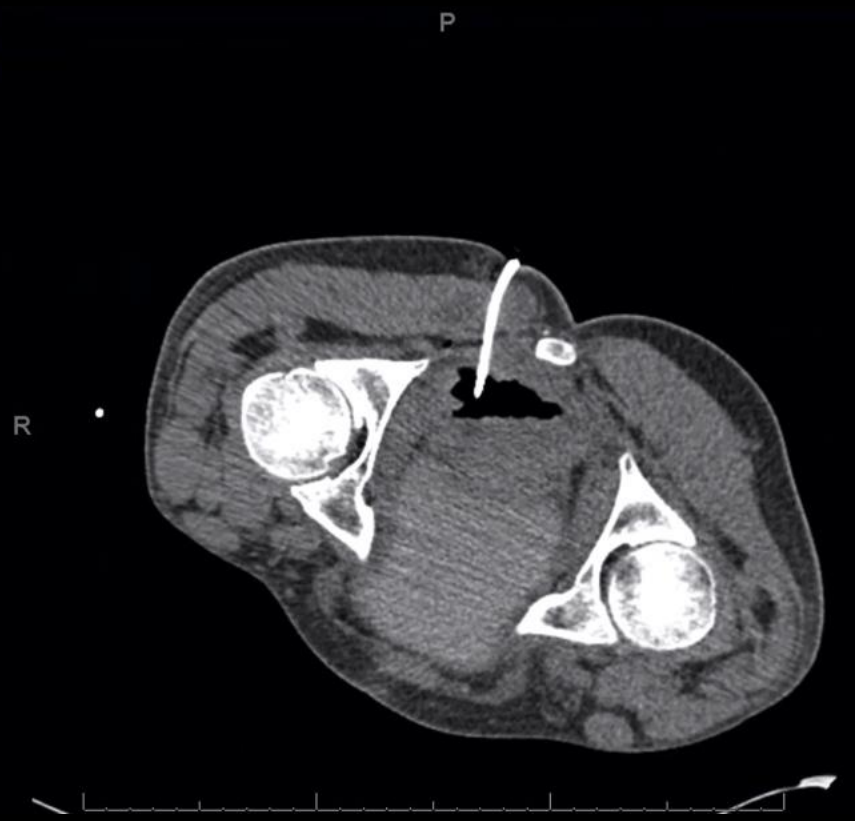
Large fluid collection in the J-pouch excision bed consistent with large abscess.

*Patient returned a couple weeks later due to fever, abdominal pain/distension for which a repeat CT was completed.

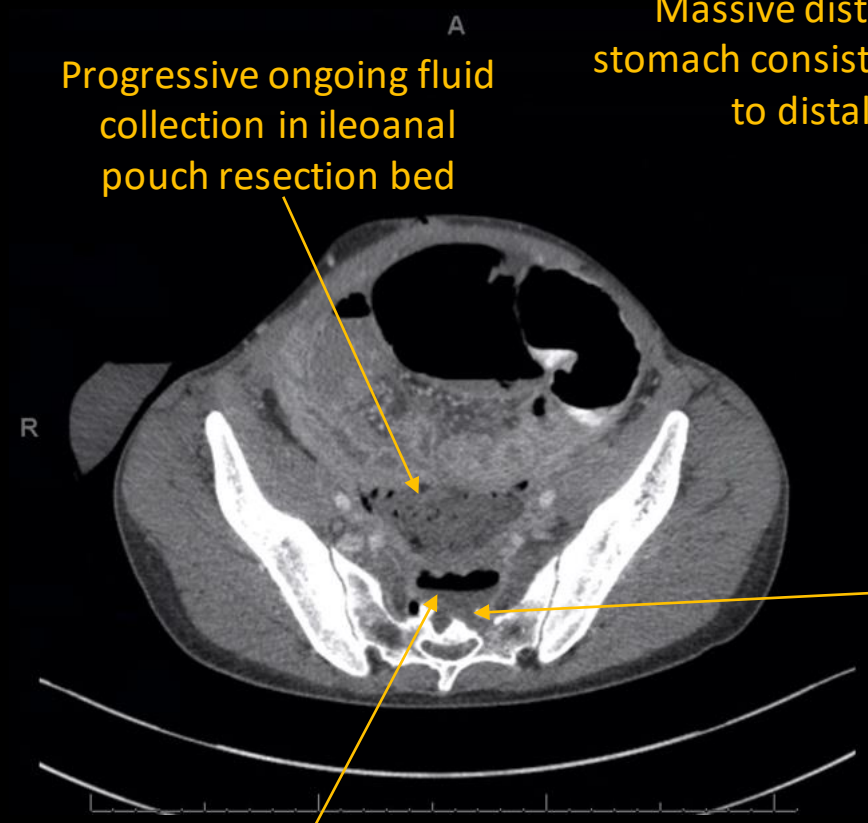
Repeat CT Findings: Unlabeled





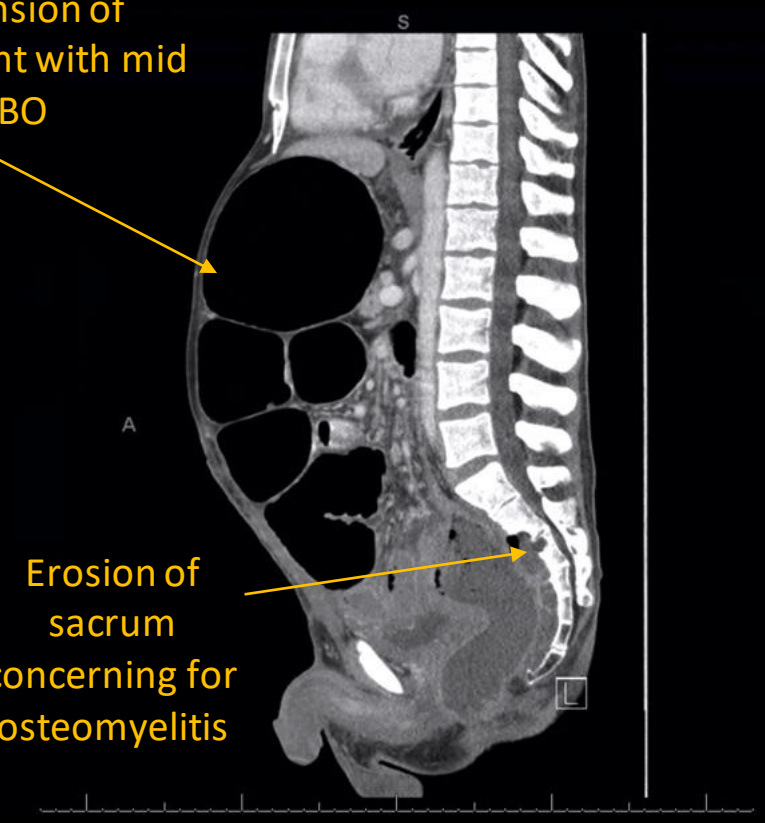


Repeat CT Findings: Labeled



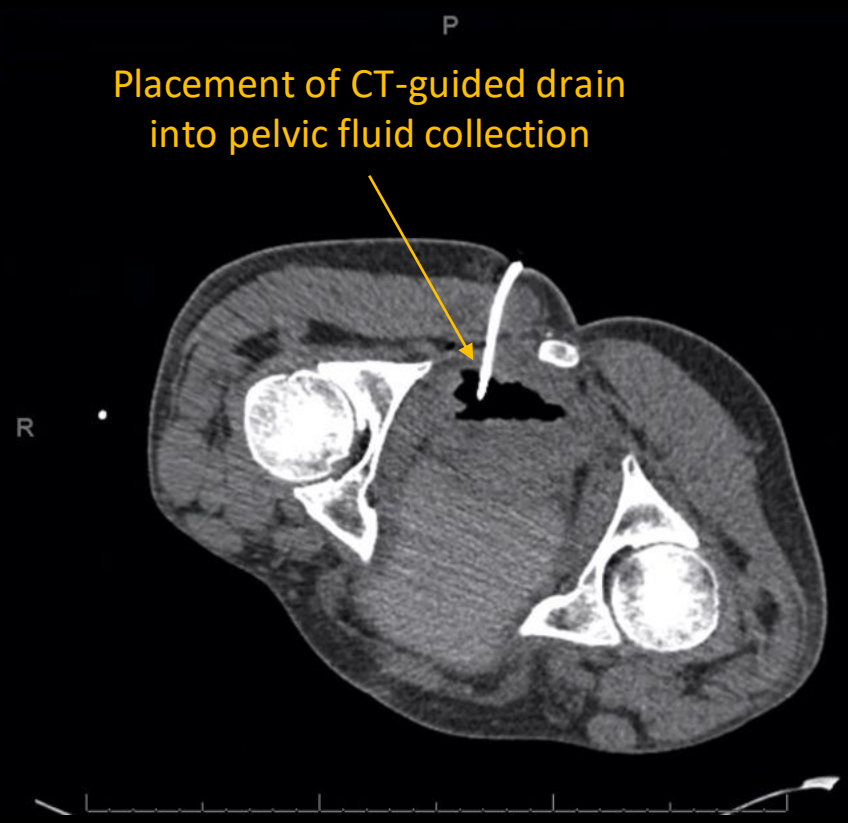
Progressive ongoing fluid collection in ileoanal pouch resection bed

Massive distension of stomach consistent with mid to distal SBO



Erosion of sacrum concerning for osteomyelitis

Extension into presacral space superiorly consistent with abscess



Placement of CT-guided drain into pelvic fluid collection

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Final diagnosis:

Recurrent large fluid collection consistent with abscess in excision bed.

Case Discussion: What are the indications and outcomes for pouch excision?

- Ulcerative colitis (UC) procedure of choice:
  - Restorative proctocolectomy with ileal-pouch anal anastomosis (IPAA)
- Benefits:
  - Potential cure for UC
  - Improved continence and bowel function
  - Increased quality of life
- Complications:
  - Intra-abdominal/peripouch abscesses (pelvic sepsis can develop in up to 25% after IPAA most likely due to anastomotic disruption). *most common cause of pouch failure
  - Post-op SBO (incidence between 10-25%)
  - Pouchitis: symptomatic inflammation of rectal remnant cuff (2-6% of pts with UC)
  - Reoperation/revisional surgery
  - Disease recurrence

Case Discussion cont.

- Conclusion:
  - High rate of both short and long-term postoperative complications for IPAA.
  - Appropriate counseling should be utilized to set expectations.
  - Necessitates thorough surgical decision-making and technique.
  - Early detection is key to management of post-op complications and pouch salvage.

References

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