

AMSER Case of the Month

October 2026

49-year-old male presents with worsening abdominal pain

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Patient Presentation

- CC: worsening abdominal pain
- HPI: Patient presented to the ED for history of one month of worsening abdominal pain, bloating, and diarrhea. He also endorsed fatigue and 10 lb unintentional weight loss over one month. No N/V or fevers. Transferred from OSH for further workup.
- PMHx: Barrett's esophagus
- Vitals: T 98.8°F, BP 127/76, HR 76, RR 16, SpO2 97%
- Physical exam: mild abdominal distension and mild tenderness to palpation in all quadrants, + bowel sounds, no rebound tenderness/rigidity/guarding.

Pertinent Labs and Imaging

- WBC 14.1 (H), neutrophils 9.20 (H)
- Hb 12.6 (L), MCV 85
- Plt 586 (H)
- LDH 334 (H)
- Uric acid 5.8
- Cr 0.97
- CA-125 207.8 (H)
- CEA and CA19-9 WNL
- CT abdomen at OSH showed small abdominal masses with prominent ulcerated RUQ mass c/f malignancy

Clinical Question

- To determine if there's a small bowel perforation and determine site of primary malignancy

What Imaging Should We Order?

ACR Appropriateness Criteria

Variant: 1 Palpable abdominal mass. Suspected intra-abdominal neoplasm. Initial imaging.

Procedure	Appropriateness Category	Relative Radiation Level
US abdomen	Usually Appropriate	0
CT abdomen with IV contrast	Usually Appropriate	☼☼☼
MRI abdomen without and with IV contrast	May Be Appropriate	0
MRI abdomen without IV contrast	May Be Appropriate	0
CT abdomen without IV contrast	May Be Appropriate	☼☼☼
Radiography abdomen	Usually Not Appropriate	☼☼
Fluoroscopy contrast enema	Usually Not Appropriate	☼☼☼
Fluoroscopy upper GI series	Usually Not Appropriate	☼☼☼
Fluoroscopy upper GI series with small bowel follow-through	Usually Not Appropriate	☼☼☼
CT abdomen without and with IV contrast	Usually Not Appropriate	☼☼☼☼
FDG-PET/CT skull base to mid-thigh	Usually Not Appropriate	☼☼☼☼

This imaging modality was ordered by the admitting team

Findings (unlabeled)

CT abdomen with IV contrast



Findings (labeled)

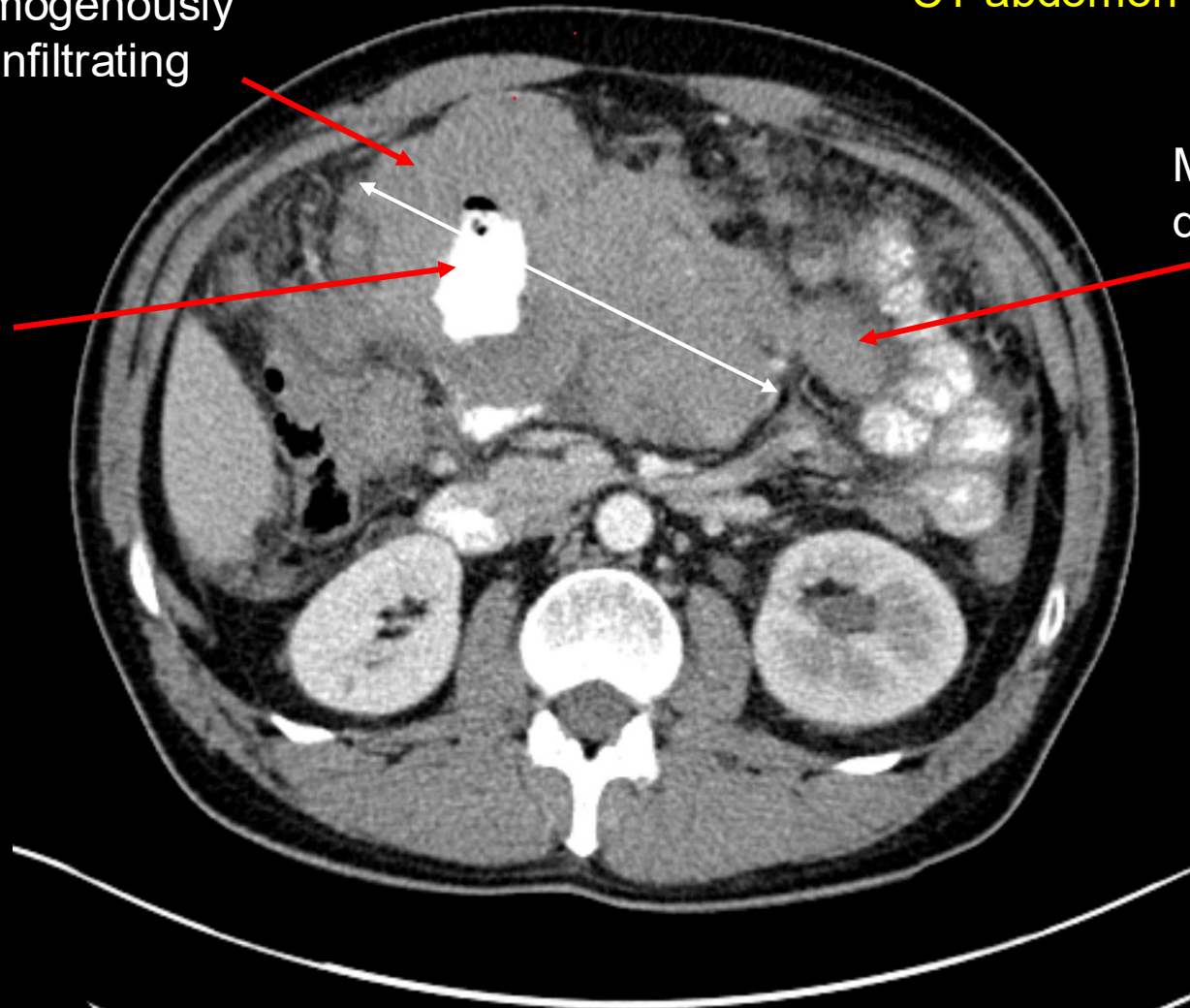
CT abdomen with IV contrast

13.9 x 8.5 cm homogenously enhancing mass infiltrating distal jejunal wall

Mesenteric soft tissue deposit

Oral contrast accumulated in jejunal lumen

No extravasation of oral contrast and no evidence of bowel perforation



Findings (unlabeled)

CT abdomen with IV contrast

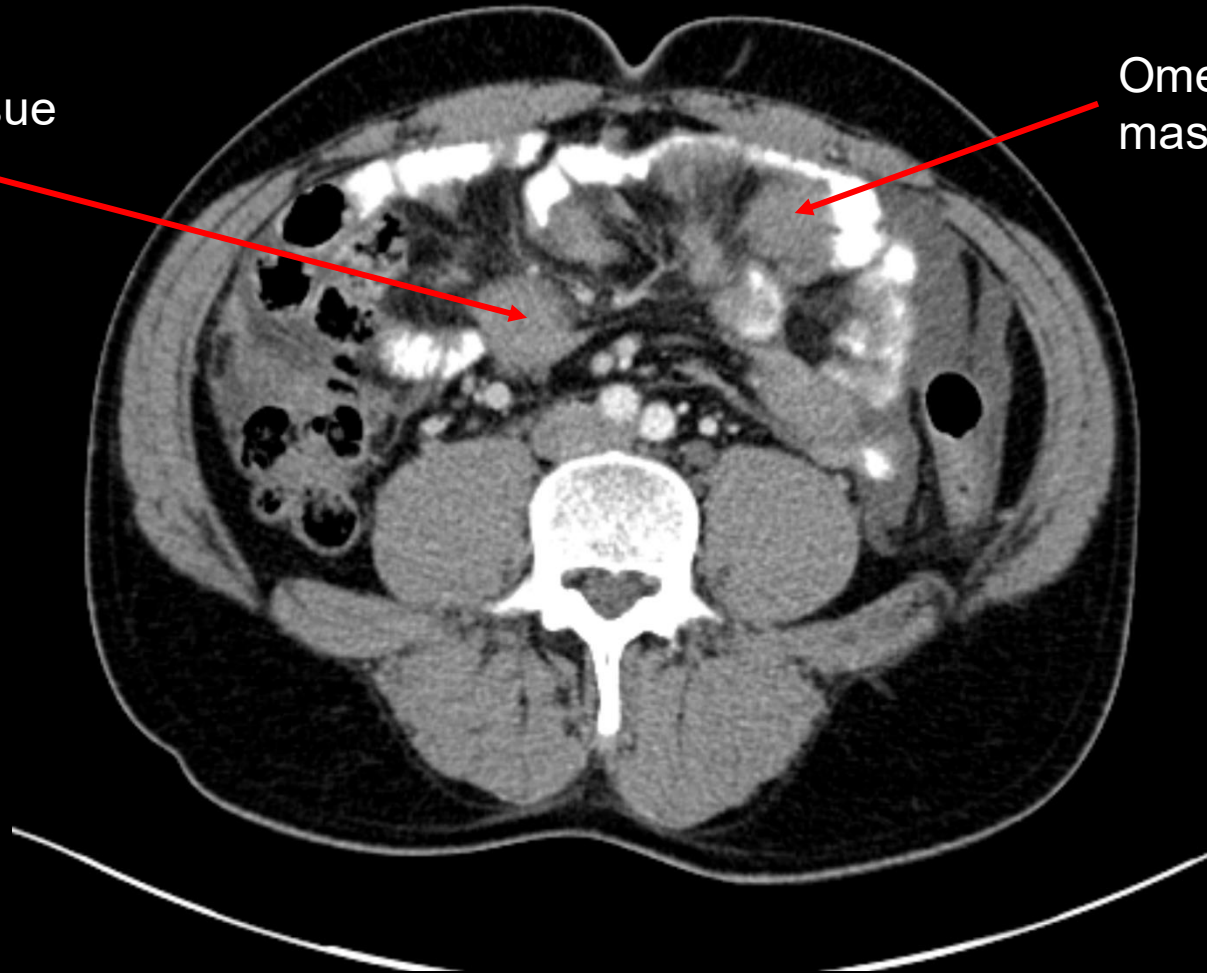


Findings (labeled)

CT abdomen with IV contrast

Mesenteric soft tissue
mass deposit

Omental soft tissue
mass deposit



ACR Appropriateness Criteria

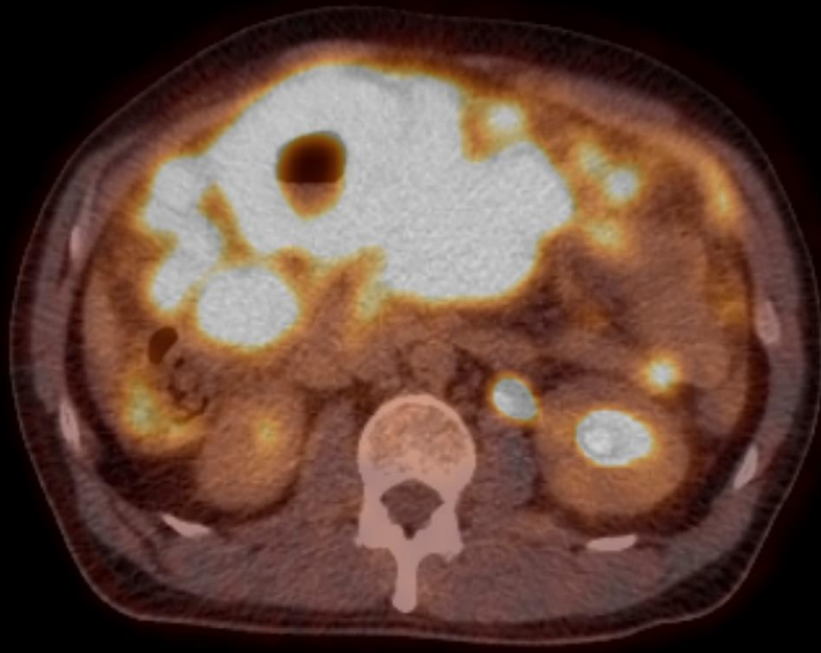
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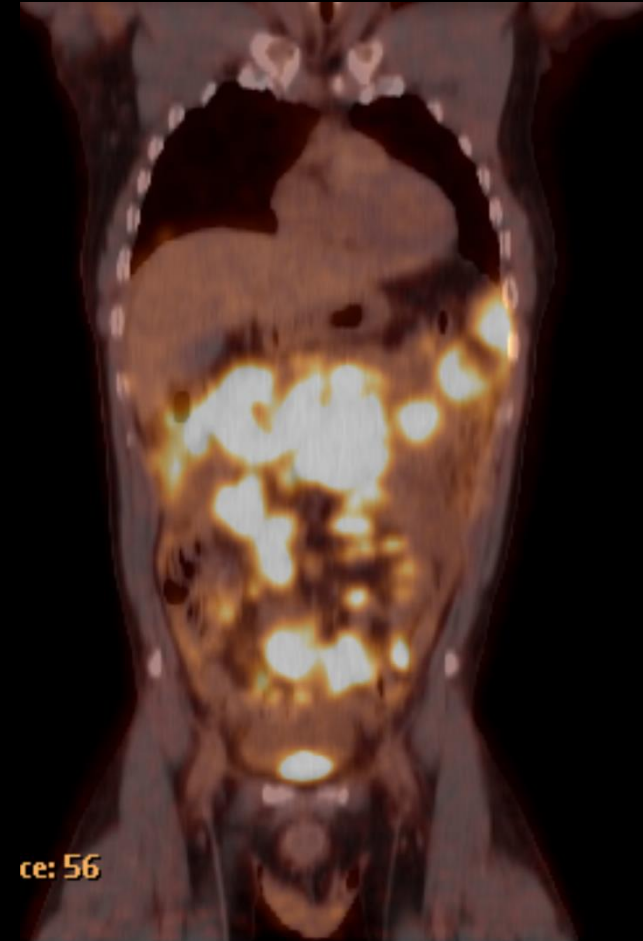
This imaging modality was ordered to evaluate for primary malignancy and for staging

Findings: (unlabeled)

FDG-PET/CT colorectal



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Findings: (labeled)

FDG-PET/CT colorectal

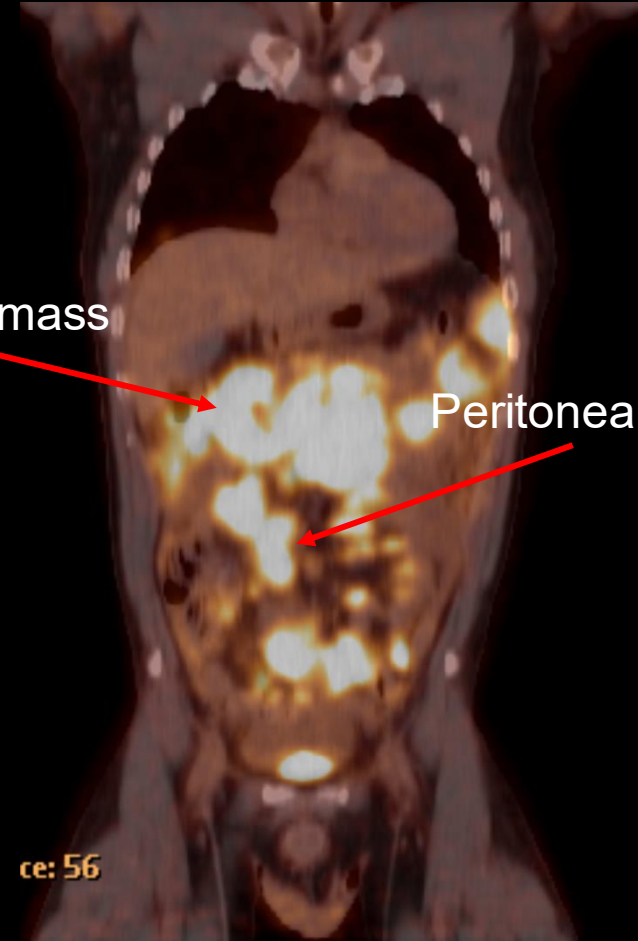
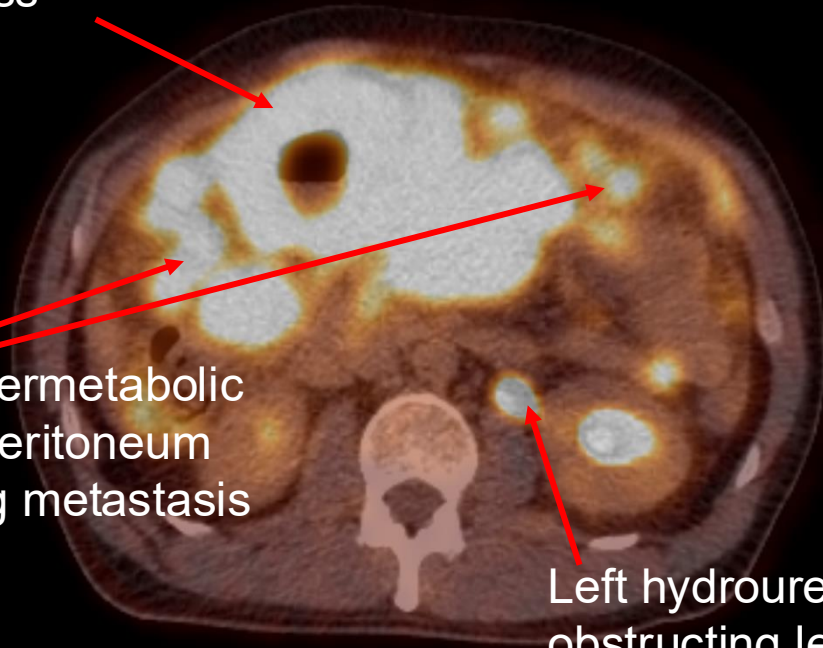
Avid FDG uptake in primary jejunal mass

Several hypermetabolic masses in peritoneum representing metastasis

Left hydroureter d/t pelvic mass obstructing left ureter

Primary jejunal mass

Peritoneal metastases



Final Dx:

Burkitt Lymphoma

Hospital Course

- Patient underwent small bowel resection of the jejunal mass and left ureteral stent placement
- Surgical pathology consistent with Burkitt lymphoma
- Immunohistochemistry: CD10+, CD20+, BCL6+, Ki-67 > 95%
- + MYC rearrangement on FISH confirmed Burkitt lymphoma
- Extensive extranodal peritoneal metastasis shown in FDG-PET/CT consistent with stage 4
- Patient underwent 6 cycles of rituximab + hyper-CVAD (hyperfractionated cyclophosphamide, vincristine, adriamycin, dexamethasone)

Discussion

Epidemiology:

- Burkitt lymphoma is a highly aggressive B cell lymphoma¹
- Most common non-Hodgkin lymphoma of childhood, but is rare in adults and only represents 1-2% of all adult non-Hodgkin lymphomas²
- 3 forms: endemic, sporadic, and immunodeficiency associated
- Commonly presents extranodally, with 60-80% of cases presenting in the abdomen³
 - Commonly presents in the ileocecal region, presentation in the jejunum is rare

Discussion

- Radiographic findings:
 - CT with IV contrast: homogenously enhancing soft tissue mass or bowel wall thickening
 - FDG-PET/CT: avid FDG uptake of soft tissue mass and metastatic deposits

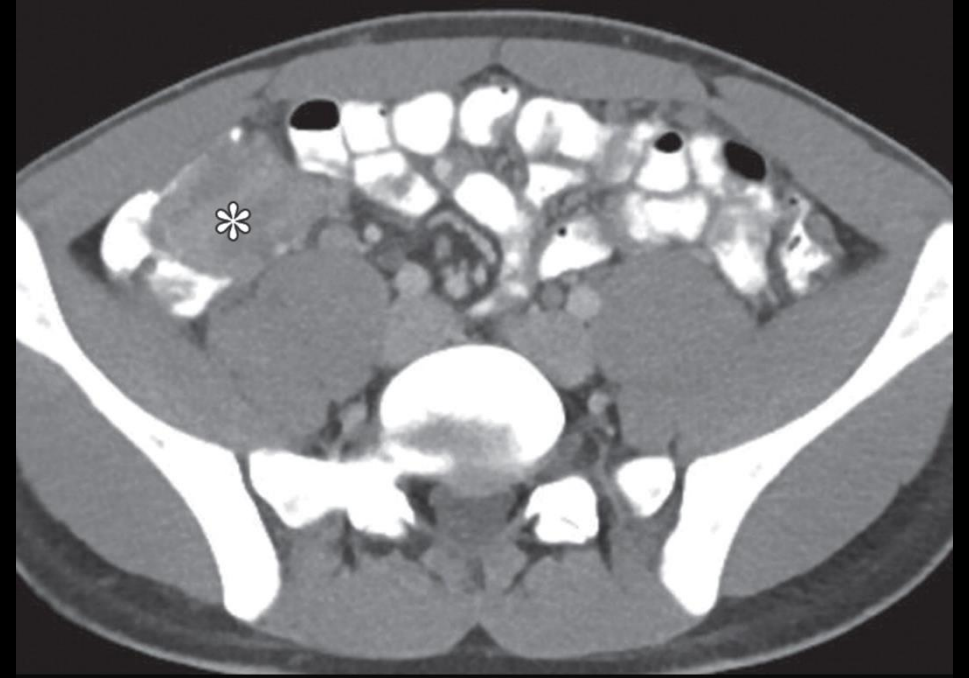


Figure 1. Axial CT with contrast for a patient with Burkitt lymphoma. * shows the primary mass in the terminal ileum extending into the cecum.⁴

Discussion

Diagnosis:

- Core needle or surgical biopsy – monomorphic B cells, “starry sky” appearance from tangible body macrophages¹
- Immunohistochemistry – CD10+, CD20+, BCL6+
- FISH showing +MYC rearrangement
- Imaging: CT abdomen with contrast, FDG PET/CT (preferred for staging as it better detects extranodal disease)¹
- Lumbar puncture to assess for CNS spread⁵

Treatment:

- Treated with combination of rituximab + chemotherapy, CNS targeted therapy, and tumor lysis syndrome prophylaxis⁵

References:

- 1. Roschewski M, Staudt LM, Wilson WH. Burkitt's Lymphoma. *New England Journal of Medicine*. 2022;387(12):1111-1122. doi:10.1056/NEJMra2025746
- 2. Teras LR, DeSantis CE, Cerhan JR, Morton LM, Jemal A, Flowers CR. 2016 US lymphoid malignancy statistics by World Health Organization subtypes. *CA Cancer J Clin*. 2016;66(6):443-459. doi:10.3322/caac.21357
- 3. Xie Y, Jia M, Shi J, Tao Y. Inferior prognosis of gastric involvement in patients with gastrointestinal Burkitt Lymphoma. *Cancer Medicine*. 2020;9(9):3107-3114. doi:10.1002/cam4.2975
- 4. Lewis RB, Mehrotra AK, Rodríguez P, Manning MA, Levine MS. From the Radiologic Pathology Archives: Gastrointestinal Lymphoma: Radiologic and Pathologic Findings. *RadioGraphics*. 2014;34(7):1934-1953. doi:10.1148/rg.347140148
- 5. Silkenstedt E, Salles G, Campo E, Dreyling M. B-cell Non-Hodgkin lymphomas. *Lancet*. 2024;403(10438):1791-1807. doi:10.1016/S0140-6736(23)02705-8