

# AMSER Case of the Month

## October 2021

60-year-old male with dysphagia, abdominal pain, and weight loss



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# Patient Presentation

- **HPI:** Several months of inability to keep solid foods down, low-grade fever, and night sweats. Recent worsening dysphagia with mild diffuse abdominal pain and 10 lb weight loss.
- **ROS:** Fatigue, nausea, regurgitation after eating
- **PMH:** Crohn's disease, Hodgkin lymphoma s/p chemotherapy (1981), bladder cancer s/p resection (2018), GERD and Barrett's esophagus s/p fundoplication (EGD 11/2020 showed enteritis)

# Patient Presentation

- **SH:** non-smoker, no alcohol use
- **PE:** vitals normal, thin and ill-appearing, no abdominal tenderness or masses
- **Labs:** Hb 12.1, lipase normal, ALT 65, HCV Ab negative, HIV Ag/Ab Combo negative, LDH 1203

What Imaging Should We Order?

# Select the applicable ACR Appropriateness Criteria

**Variant 2:** Epigastric pain with clinical suspicion for gastric cancer. Initial imaging.

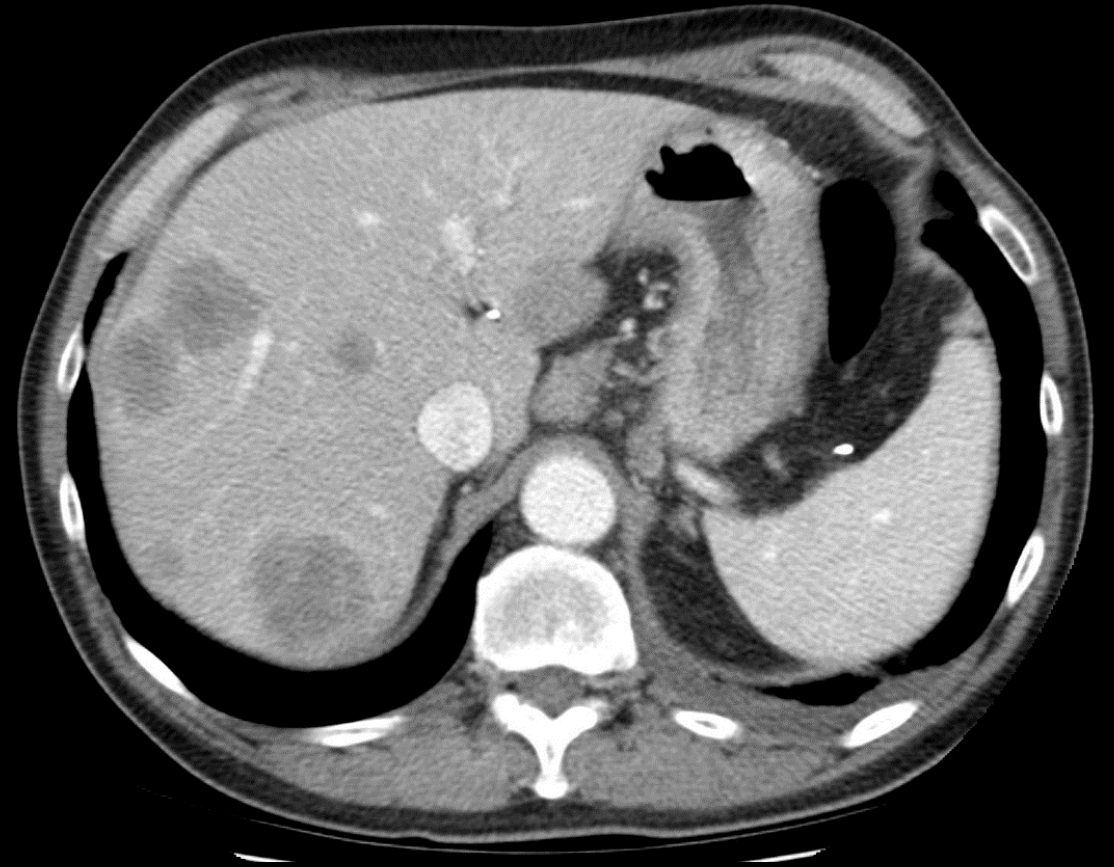
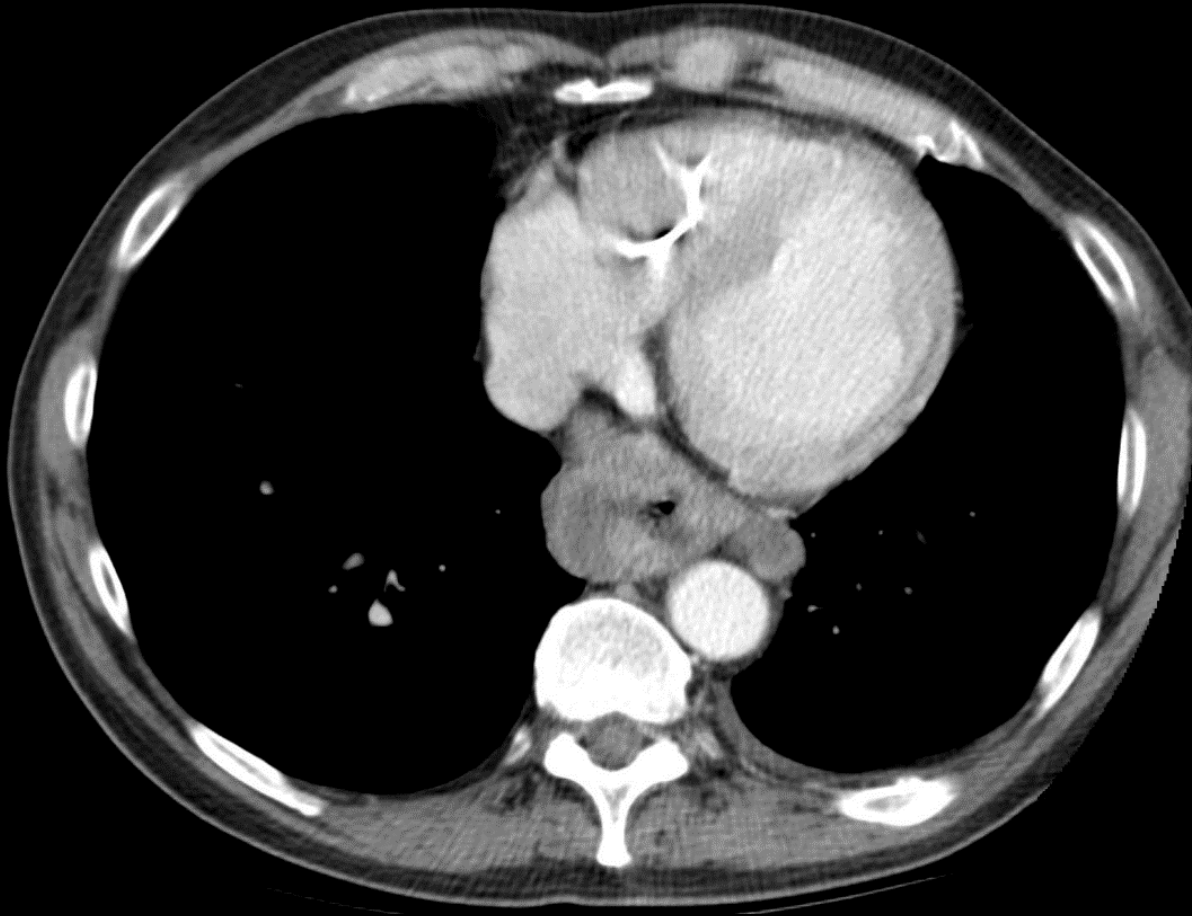
Procedure	Appropriateness Category	Relative Radiation Level
Fluoroscopy upper GI series	Usually Appropriate	⊗⊗⊗
CT abdomen and pelvis with IV contrast	Usually Appropriate	⊗⊗⊗
CT abdomen and pelvis without IV contrast	May Be Appropriate	⊗⊗⊗
CT abdomen with IV contrast	May Be Appropriate (Disagreement)	⊗⊗⊗
CT abdomen without IV contrast	May Be Appropriate	⊗⊗⊗
CT abdomen with IV contrast multiphase	May Be Appropriate	⊗⊗⊗⊗
Fluoroscopy biphasic esophagram	Usually Not Appropriate	⊗⊗⊗
Fluoroscopy single contrast esophagram	Usually Not Appropriate	⊗⊗⊗
MRI abdomen without and with IV contrast	Usually Not Appropriate	○
MRI abdomen without and with IV contrast with MRCP	Usually Not Appropriate	○
MRI abdomen without IV contrast	Usually Not Appropriate	○
MRI abdomen without IV contrast with MRCP	Usually Not Appropriate	○
CT abdomen and pelvis without and with IV contrast	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 physician



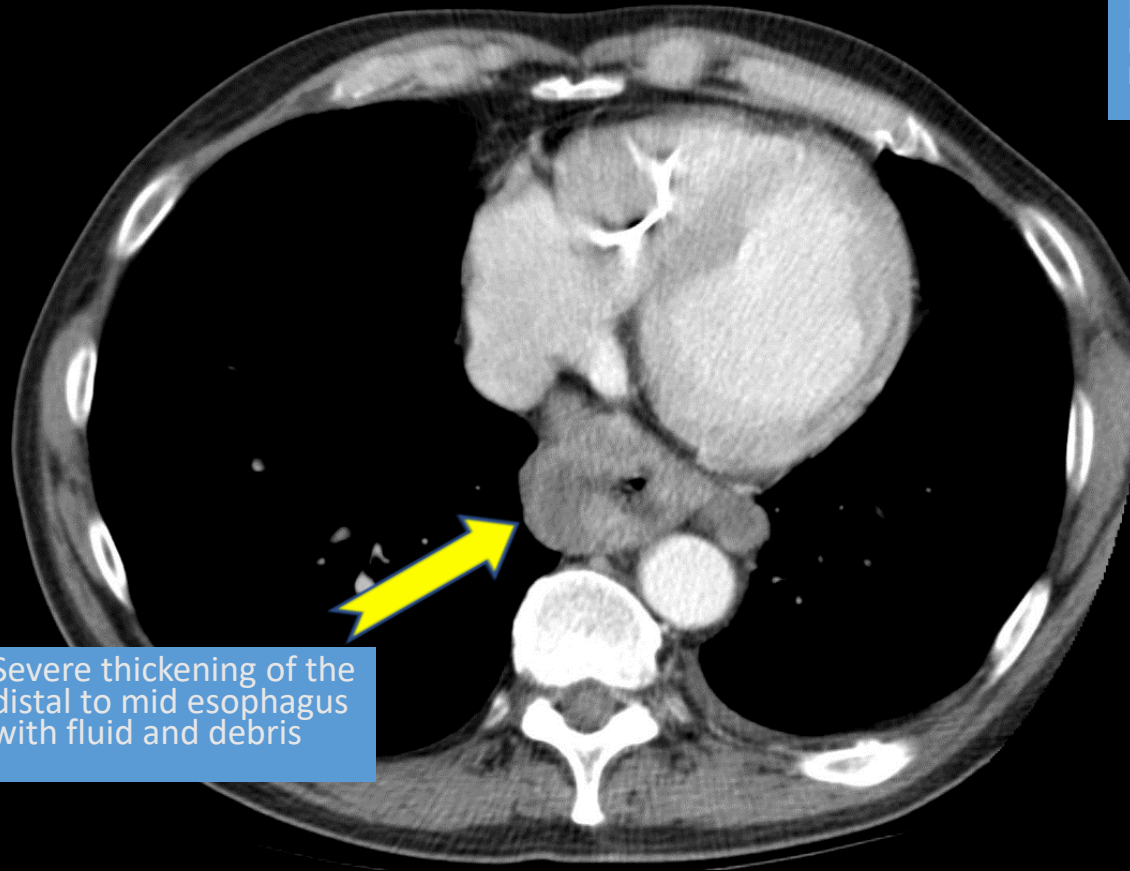
- Given abdominal pain, dysphagia, constitutional symptoms, PMH of cancer – concern for gastric or esophageal malignancy versus other abdominal pathologies
- May also consider fluoroscopy or endoscopy for dysphagia

# Findings



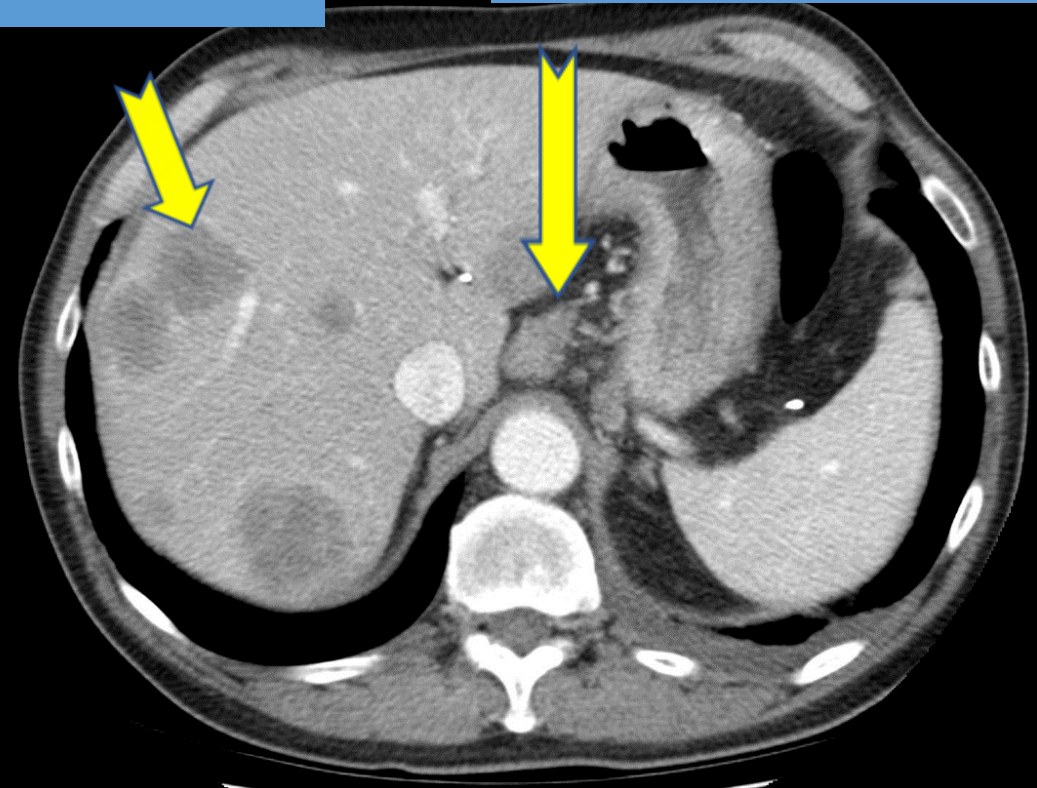


# Findings



Severe thickening of the distal to mid esophagus with fluid and debris

Multiple bilobar hepatic lesions measuring up to 5 cm



Lymphadenopathy around the GE junction, measuring up to 3.3 cm along the gastrohepatic ligament

# Endoscopy



Lower Third of the Esophagus : Mass, Food



Circumferential mass (biopsy taken)

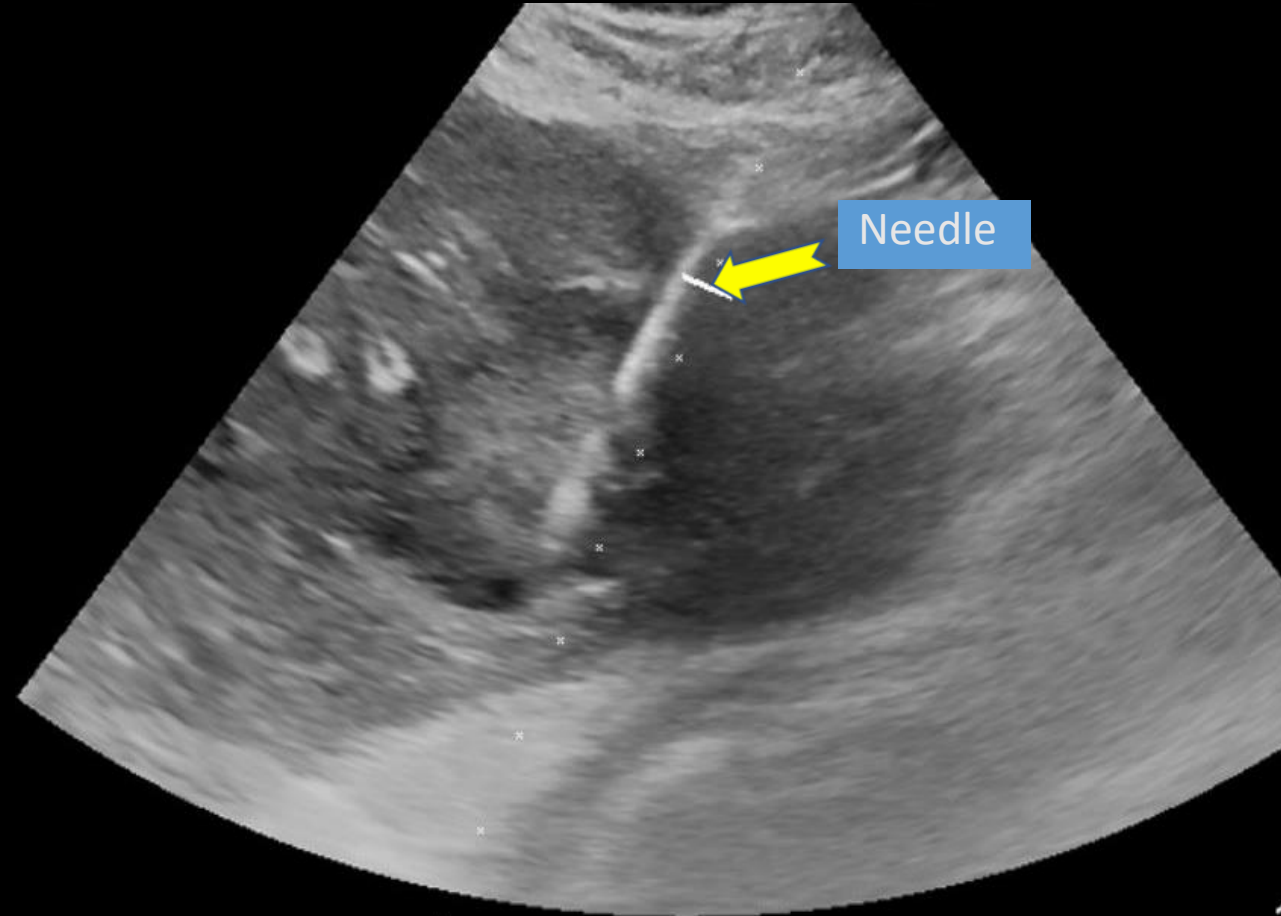


Gastroesophageal Junction : Barrett's esophagus

(separate from the mass)



# Ultrasound-Guided Liver Biopsy



Liver

Bx 7.3cm

1

Final Dx:

Esophageal Sarcoma with metastasis to the liver

# Outcome

- Esophageal pathology showed SMARCA4-deficient undifferentiated sarcoma. Liver pathology was the same, indicating metastasis.
- The patient underwent jejunostomy tube placement for feedings, and began chemotherapy with doxorubicin, ifosfamide, and mesna. No further surgery or radiation therapy was planned.

# Case Discussion

- Esophageal cancers – squamous cell carcinoma and adenocarcinoma most common; several rarer types (<1% are sarcomas)
- General risk factors include: age, male, tobacco/alcohol use, GERD, Barrett's, personal cancer history
- AJCC TMN staging for all types
- Take into account grading: well differentiated (G1), moderately differentiated (G2), poorly differentiated (G3), undifferentiated (G4)
- Fluoro/endoscopy aids diagnosis, plus CT or PET for staging

# Case Discussion

- Soft tissue sarcomas – aggressive with high recurrence rate
- Can be primary or a secondary malignancy as a result of past cancer treatment with radiation or chemotherapy, as in this patient
- LDH may be elevated in lymphoproliferative disorders, such as Hodgkin's, as well as sarcomas
- Large tumor size (>5.6cm), LDH>240, Hb<12.4 associated with malignancy of soft tissue tumors

# Case Discussion

- *SMARCA4* – gene involved in chromatin remodeling
- Variety of rare SMARCA4-deficient neoplasms including thoracic sarcomas – usually in the lungs and often associated with smoking history
- For all esophageal cancers: resection recommended if no invasion/metastasis. However esophagectomy has significant morbidity/mortality; consider adjuvant radiation therapy, chemotherapy alone
- Metastatic disease, such as in this patient, warrants chemotherapy and supportive measures



# References

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