

A Case of Back Pain as the Presenting Symptom of Metastatic Gastric Adenocarcinoma in a Young Male

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Introduction

- Gastric adenocarcinoma typically occurs in fifth to seventh decades of life [1]
- Only 5% of patients diagnosed before age forty [1]
- Most common presenting symptoms include weight loss, abdominal pain and bleeding [2]
- Limited publications describe gastric cancer (GC) in younger patient populations, especially those with atypical presentations

Case Presentation

- A 29yo M with no significant PMHx presented to his primary care physician with back pain x 2 months
- Outpatient magnetic resonance imaging (MRI) of his lumbar spine was concerning for metastatic cancer, so he was sent to the emergency department
- Labs: Hgb 10.3 g/dL (normocytic anemia), alkaline phosphatase 744, uric acid 10.7
- Complete MRI views of his spine demonstrated extensive osseous metastatic disease in his cervical, thoracic, lumbar, and sacral regions (Figure 1A)
- Underwent computed tomography-guided biopsy of the metastatic lesions in his right sacrum
- Immunohistochemical staining was suggestive of upper gastrointestinal or pancreaticobiliary malignancy
- Next step was endoscopic evaluation:
 - Upper endoscopy revealed congestive gastropathy in the cardia and fundus, suspicious for infiltrative pathology, which was biopsied (Figure 1B)
 - Endoscopic ultrasound revealed subtle wall thickening at the gastroesophageal junction and few small lymph nodes in the peri-pancreatic and celiac region. Pathology confirmed poorly-differentiated gastric adenocarcinoma (Figure 1C). H Pylori staining was negative.
- Started on palliative chemotherapy and radiation

Figures

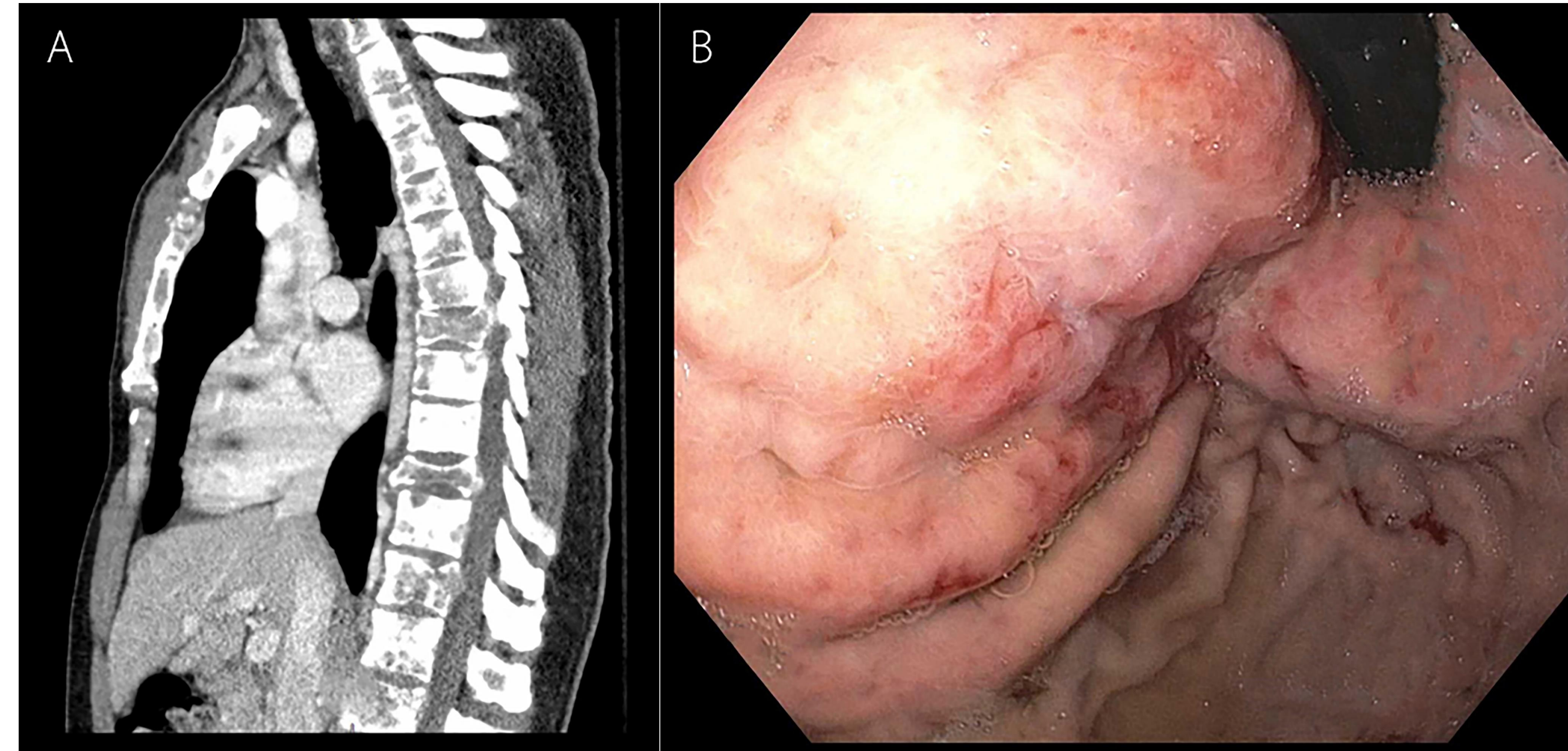


Figure 1A. Sagittal view of MRI revealing metastatic lesions throughout spine.

Figure 1B. Congestive gastropathy appreciated during endoscopic examination. Endoscopic ultrasound revealed subtle wall thickening in this area.

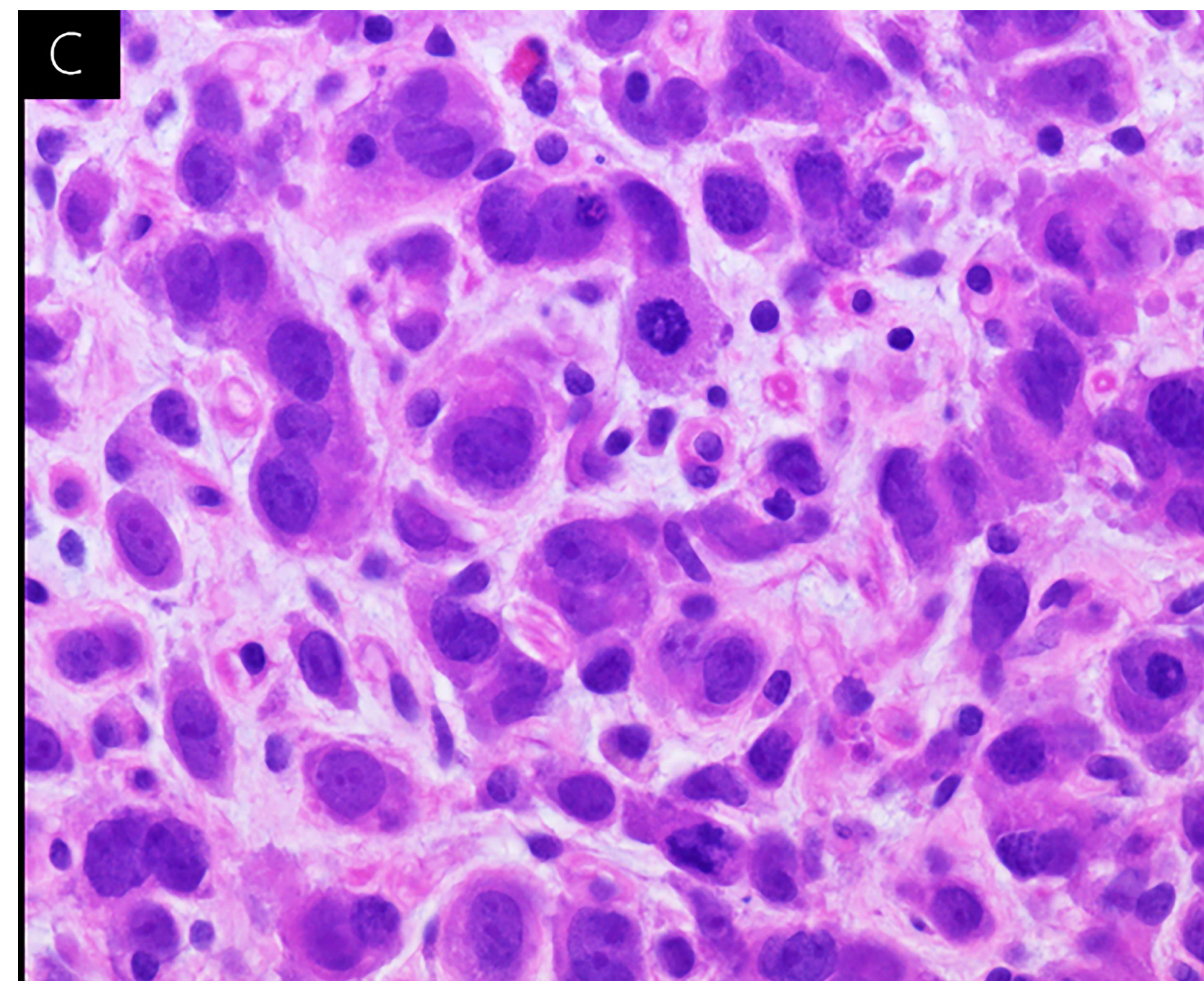


Figure 1C. Hematoxylin and eosin stain of gastric biopsies consistent invasive, diffuse-type, poorly-differentiated gastric adenocarcinoma. Evaluation for Helicobacter pylori infection was negative.

Discussion

- To the best of our knowledge, this is the only case described in the literature thus far that reviews a young male presenting with chronic back pain as the first symptom of metastatic GC.
- Apart from typically being found in older populations, GC usually presents with symptoms of weight loss or gastrointestinal complaints. Meanwhile, this patient's presenting symptom was back pain from his bony metastases.

Conclusion

- Gastric cancer remains a leading cause of death from cancer worldwide [3-5], and there has been epidemiologic data suggesting that the incidence of gastric cancer is gradually increasing in younger people [5, 6]. This case demonstrates that it is an important consideration in patients presenting with signs and symptoms concerning for malignancy of unclear origin, including patients of a younger demographic.
- Chronic back pain should be thoroughly investigated, including in younger individuals, to avoid missing clinically significant conditions.

References

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