

Endoscopic Ultrasound-Guided Biopsy of Non-Functioning Retropancreatic Celiac Paraganglioma Masquerading as Malignant Lymph Node

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Introduction

- Paragangliomas are rare neuroendocrine tumors derived from chromaffin cells
- Pheochromocytomas are localized to the adrenal gland whereas paragangliomas can be found anywhere in the body
- We present a unique case of a woman presenting with abdominal pain
- She was found to have a micro-lobulated mass at the bifurcation of the celiac axis on imaging
- The mass was suspected to be metastatic lymphadenopathy
- Biopsy of the mass via endoscopic ultrasound-guided fine needle biopsy revealed it to be a paraganglioma

Case Description

- 59-year-old female with history of chronic kidney disease and tobacco use presented to PCP office with abdominal fullness, diffuse abdominal pain, and urinary frequency
- Abdominal CT scan revealed 2.8cm mass with micro-lobulated margins located at celiac bifurcation (Fig 1A, 1B)
- Follow up PET scan showed increased uptake by the mass with a standardized uptake value of 6.7 (Fig 1C)
- Due to the delicate location of the lesion, she was referred for EUS-guided fine needle biopsy
- EUS revealed two hypoechoic, triangular masses (20mm and 10mm) in the celiac region, thought to be lymph nodes (Fig 1D, Fig 1E)
- Pathology consistent with a paraganglioma
- Lab workup significant for urinary free cortisol of 56 mcg/24 hr (ref: 4.0 to 50.0 mcg/24 hr) and normal urine catecholamines
- Opted to see endocrine surgical specialist and is undergoing surveillance imaging with potential future surgical resection

Images

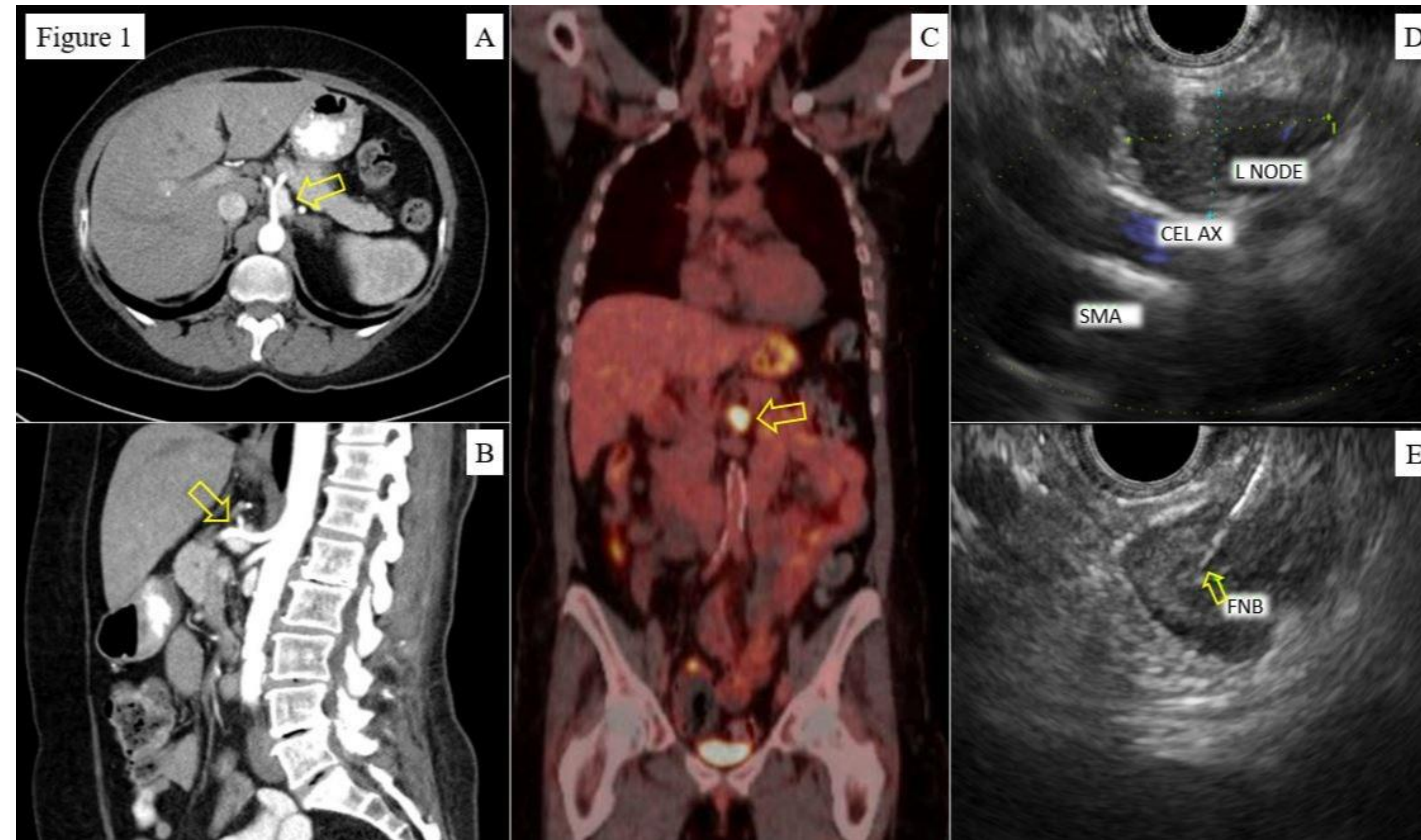


Figure 1A,B: Computed tomography images showing abdominal mass near celiac bifurcation, transverse (A) and sagittal (B) planes

Figure 1C: Positron emission tomography scan revealing enhancement of abdominal mass, coronal view

Figure 1D: Endoscopic ultrasound image of mass suspected to be lymph node near celiac axis

Figure 1E: Endoscopic ultrasound guided fine-needle biopsy of mass

Discussion

- Paragangliomas are a rare phenomenon
- Incidence is approximately 500-1600 cases per year in the United States
- May be misdiagnosed due to the variety of location and the nonspecific symptoms patients may have
- Most masses benign but 15-20% can be malignant
- Lesions may be functional or nonfunctional
- Can be mistaken for pancreatic neuroendocrine tumors
- More common in women than men and generally occur in middle-aged adults
- Clinicians should maintain high index of suspicion for paraganglioma in patients with unexplained abdominal masses
- EUS-guided fine needle biopsy is a useful modality to obtain sampling of these masses, especially in difficult to reach lesions as was the case for our patient

References

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