

A Rare Pancreatic Tail Schwannoma in an Asymptomatic 58-Year-Old Female

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Learning Objectives

- Schwannomas are tumors which originate from Schwann cells responsible for fabricating myelin.
- Although Schwannomas are the most common benign peripheral nerve tumor in adults, there are several variants which are remarkably less common.
- Pancreatic schwannomas are an exceedingly rare type of nerve sheath tumor which arise from either sympathetic or parasympathetic vagal nerve fibers within the pancreas.
- In 2017, only 68 cases of pancreatic schwannoma had been reported in the preceding forty years with most occurring in the pancreatic head and body.
- In this case, we discuss an extraordinarily uncommon presentation of a pancreatic tail schwannoma in an asymptomatic 58-year-old female.

Patient Presentation

A 58-year-old female with a past medical history of hypertension and hypothyroidism presented with findings of a **2 cm exophytic pancreatic tail lesion** seen on prior CT imaging. The patient reportedly had a strong family history of aortic aneurysms and was found to have a right renal lesion on screening CT. She subsequently underwent CT abdomen and pelvis which revealed a lesion concerning for pancreatic tail malignancy.

Physical Exam:

Vitals: Afebrile, BP 130/84, HR 80, RR 16, 99% on RA

General: AAOx3, NAD

Skin: Warm, dry, no jaundice

Cardio: RRR, Normal S1/S2

Respiratory: CTAB

GI: Soft, non tender, no guarding or rebound tenderness, bowel sounds +

MSK: Normal range of motion, all compartments compressible

Lab Values

140	100	16
4.1	28	0.9

14.2	214
5.4	41.5

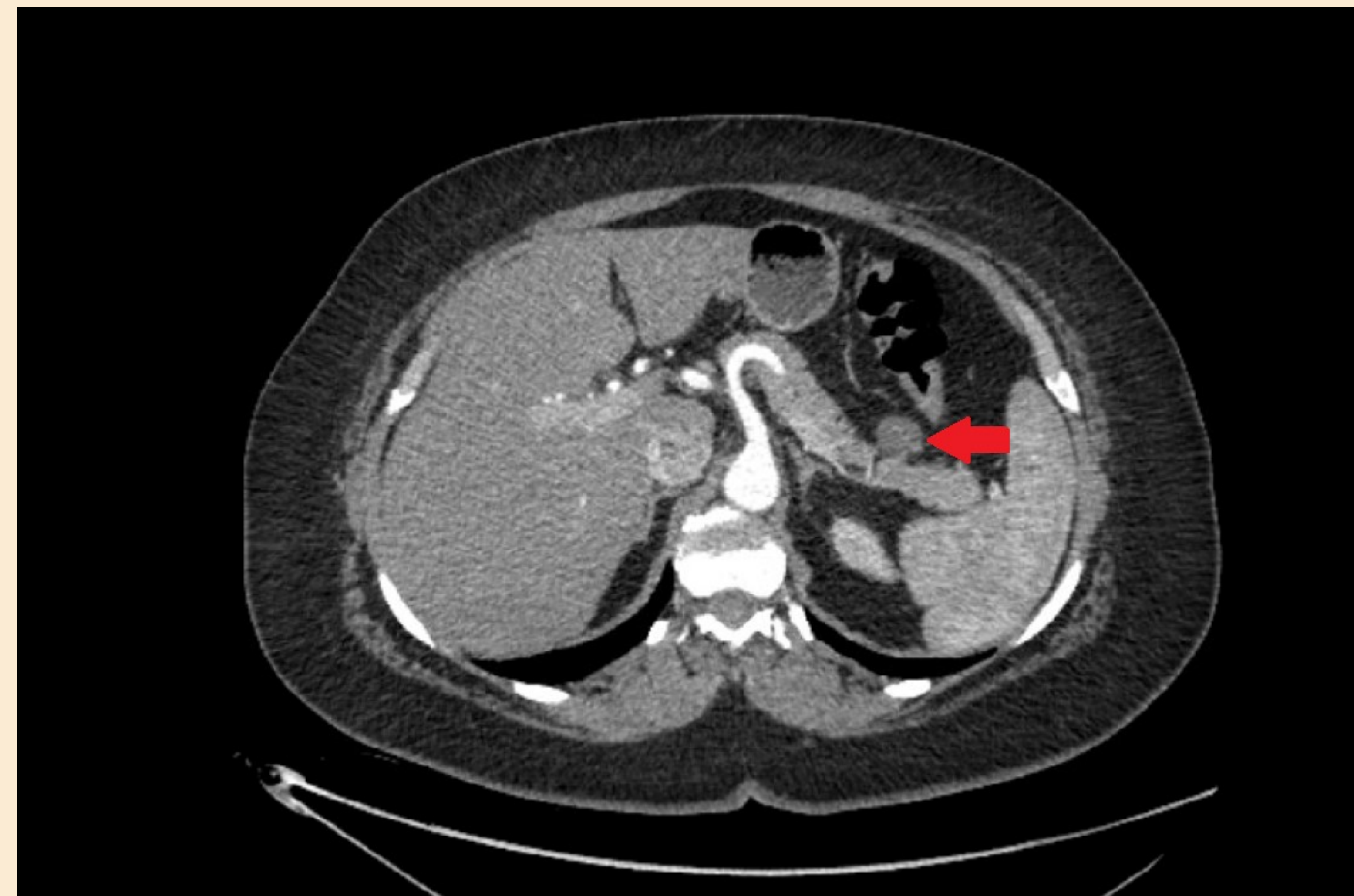
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Tbili: 0.4

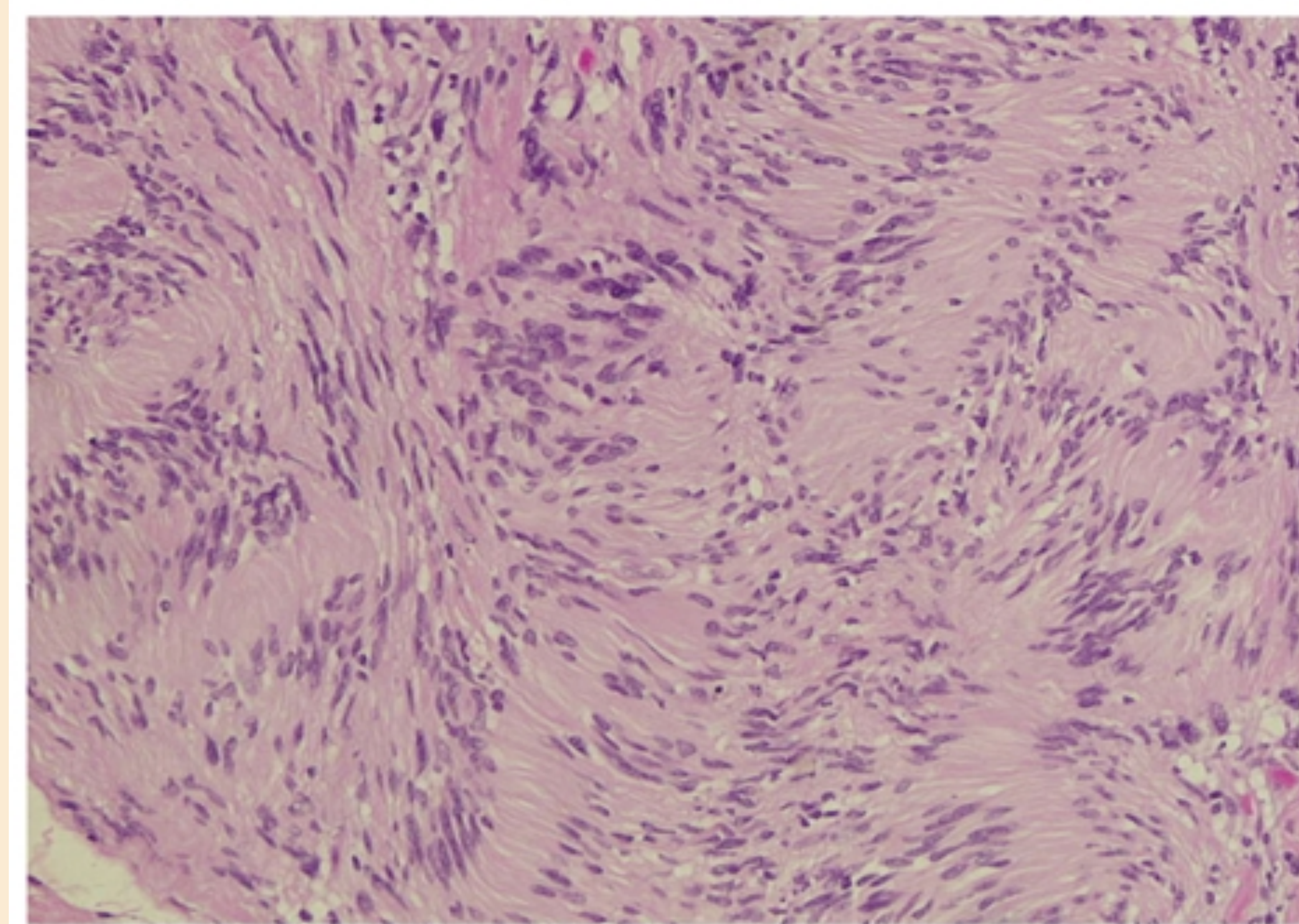
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ALP 64

CT Abdomen and Pelvis



Spindle Cell Histology



Clinical Course

- Endoscopic ultrasound (EUS) revealed a **17 x 20 mm isoechoic peripheral pancreatic tail lesion**.
- Fine needle aspiration (FNA) was performed which revealed **spindle cells** concerning for malignancy.
- Initial pathology and immunohistochemistry were inconclusive due to scant FNA aspirate obtained during EUS.
- Patient was taken to the operating room for exploratory laparotomy with distal pancreatectomy and splenectomy.
- Pathology of resected pancreatic mass showed typical histology with nuclear palisading and thick-walled vessels.
- Immunohistochemical staining supported the diagnosis of Schwannoma with diffuse, strong positivity for **S-100** and **SOX10** as well as negative staining for desmin, smooth muscle actin, CD34, pancytokeratin, CD117 and DOG1.

Take Home Points

- Pancreatic schwannoma most commonly presents with abdominal pain although 30% of cases are found in asymptomatic patients with lesions discovered incidentally on screening CT scans.
- Although these lesions rarely display malignant transformation, they pose a significant diagnostic dilemma despite advances in radiographic imaging modalities.
- Endoscopic ultrasound is often limited by insufficient specimen collection and the preoperative diagnosis often becomes quite difficult.
- Enucleation of tumor is typically a sufficient therapeutic modality however radical resection is often required to establish the definitive diagnosis.

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