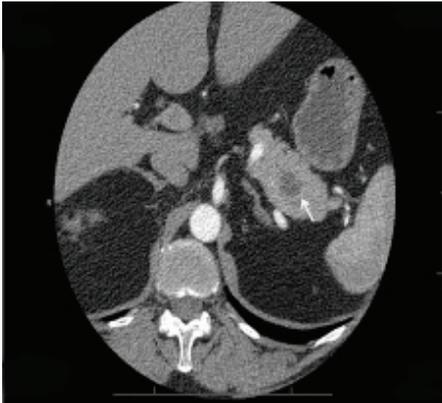


## Photoclinic



**Figure 1.** Abdominal CT scan showing a low attenuated cystic lesion in the pancreatic tail (arrow)



**Figure 2.** EUS image of the pancreas showing the solid-cystic mass lesion (arrow)

**A** 56-year-old man was incidentally found to have a 15 mm cystic lesion in the tail of the pancreas on CT scan. Two years later, the patient remained

asymptomatic and follow-up CT revealed the lesion had increased to 20 mm in maximal diameter (Figure 1). Endoscopic ultrasound (EUS) was performed and demonstrated a 26×16 mm solid and cystic lesion with a well defined border in the tail of the pancreas (Figure 2).

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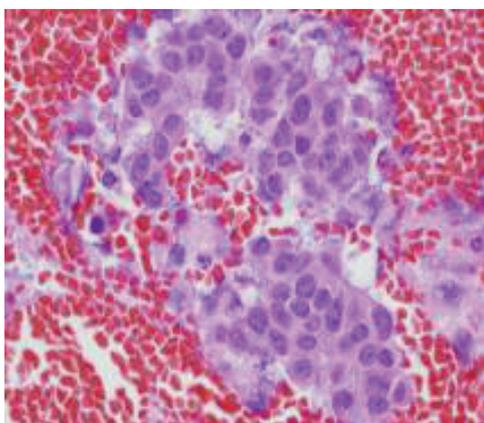
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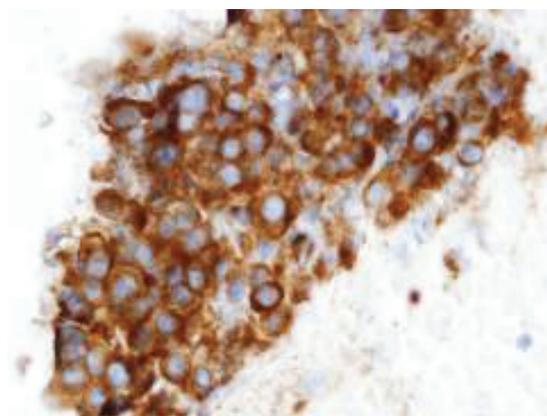
**What is your diagnosis?  
See the page 446 for diagnosis.**

## Photoclinic Diagnosis:

## Pancreatic Neuroendocrine Tumor



**Figure 3.** Hematoxylin and eosin staining of fine needle aspirate showing cohesive groups of plasmacytoid cells with round-to-oval, mildly enlarged nuclei with coarse chromatin (400×)



**Figure 4.** Immunocytochemical staining of fine needle aspirate showing diffuse strong cytoplasmic synaptophysin immunoreactivity (400×)

**E**US-guided fine needle aspiration (EUS-FNA) of the pancreatic lesion was performed. Cytology showed cohesive groups of plasmacytoid cells with round-to-oval, mildly enlarged nuclei with coarse chromatin (Figure 3). Immunocytochemical staining revealed strong cytoplasmic synaptophysin immunoreactivity (Figure 4). The cells were also positive for chromogranin on immunocytochemistry. These findings are consistent with pancreatic neuroendocrine tumor. The patient was referred for surgical resection of the tumor.

In this patient, the lesion appeared to be a pancreatic cyst on CT scan; however, EUS revealed it to be a mixed solid and cystic mass. The main differential diagnosis of mixed solid and cystic pancreatic masses may include: neuroendocrine tumors, solid pseudopapillary tumors, mucinous pancreatic tumors with possible malignant degeneration, microcystic serous cystadenomas, and ductal adenocarcinomas with cystic degeneration. Immunocytochemistry staining for synaptophysin and chromogranin in this

patient confirmed a neuroendocrine origin. About 10% of pancreatic neuroendocrine tumors may have cystic component on EUS.<sup>1,2</sup>

EUS and EUS-FNA are important diagnostic tools for evaluation of incidentally found pancreatic lesions. Many incidentally found pancreatic cystic lesions may be followed by periodic imaging. Neuroendocrine pancreatic tumors are premalignant lesions and therefore are removed by surgical resection when possible.

### Reference

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