

PANCREATIC COLLISION TUMOR: MUCINOUS CYSTADENOMA AND CLEAR CELL RENAL CELL CARCINOMA METASTASIS

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ABSTRACT

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We present a clinical, radiological, surgical, and pathological correlation case of a 49-year-old woman with a prior nephrectomy due to a clear cell renal cell carcinoma, who was then diagnosed with a multilocular cystic lesion in the pancreatic tail after a routine ultrasound. Computed tomography and magnetic resonance cholangiopancreatography showed a multilocular cystic lesion with a hypervascular wall nodule in the pancreas. The patient underwent a distal pancreatectomy and had a final diagnosis of pancreatic mucinous cystadenoma with an associated component of clear cell renal cell carcinoma (collision tumor of the pancreas).

Keywords: *Collision tumor; Pancreas; Metastasis; Clear cell renal cell carcinoma; Mucinous cystadenoma*

A 49-year-old woman with a prior left nephrectomy due to a clear cell renal cell carcinoma (RCC) was diagnosed with a cystic lesion in the pancreatic tail on abdominal ultrasound in the second year of follow-up (Figure 1A). The findings were confirmed with a contrast-enhanced computed tomography (Figure 1B) and a magnetic resonance image (MRI) (Figure 2A) with cholangiopancreatography (MRCP) (Figure 2B). Both studies demonstrated a multilocular macrocystic lesion, without communication with the main pancreatic duct, with a hypervascular peripheral solid nodule, suggesting a neoplastic tissue with high cellularity. A distal pancreatectomy was performed. The final pathological diagnosis demonstrated a pancreatic collision tumor composed of mucinous cystadenoma and RCC metastasis (Figure 3).

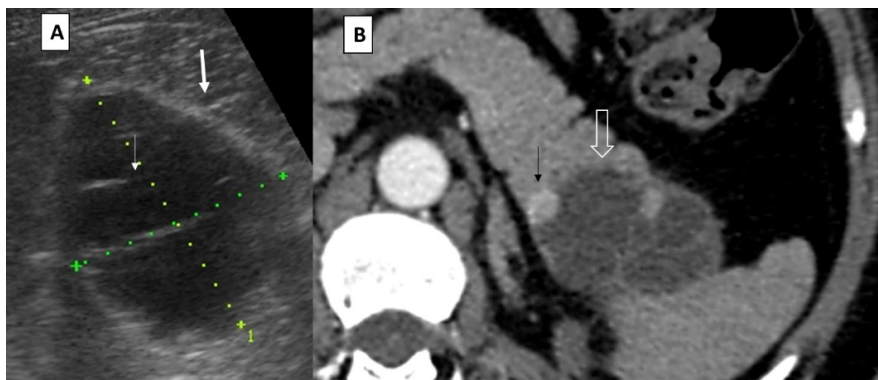


Figure 1: A: Abdominal ultrasound showing a predominantly anechoic cystic lesion in the tail of the pancreas, containing septations (thin arrow) and thick walls (thick arrow); B: Contrast-enhanced computed tomography showing a multisepated cystic lesion in the pancreatic tail (empty arrow), with a peripheral solid component (black arrow).

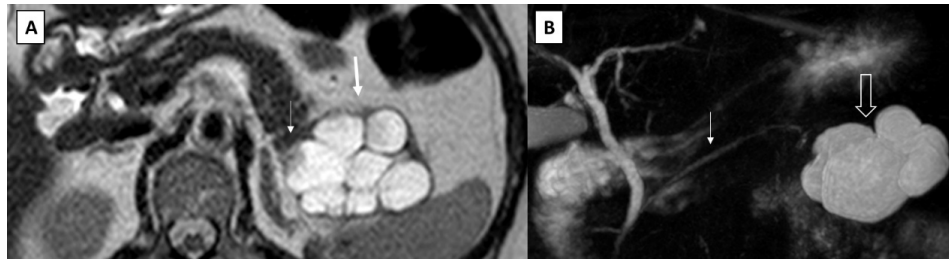


Figure 2: A: Axial T2-weighted magnetic resonance image showing a multiloculated macrocystic lesion (thick arrow), predominantly hyperintense on T2, with a solid component with intermediate T2 signal (thin arrow); B: Magnetic resonance cholangiopancreatography showing a normal caliber of main pancreatic duct (thin arrow), with no evidence of communication with the cystic lesion (empty arrow).

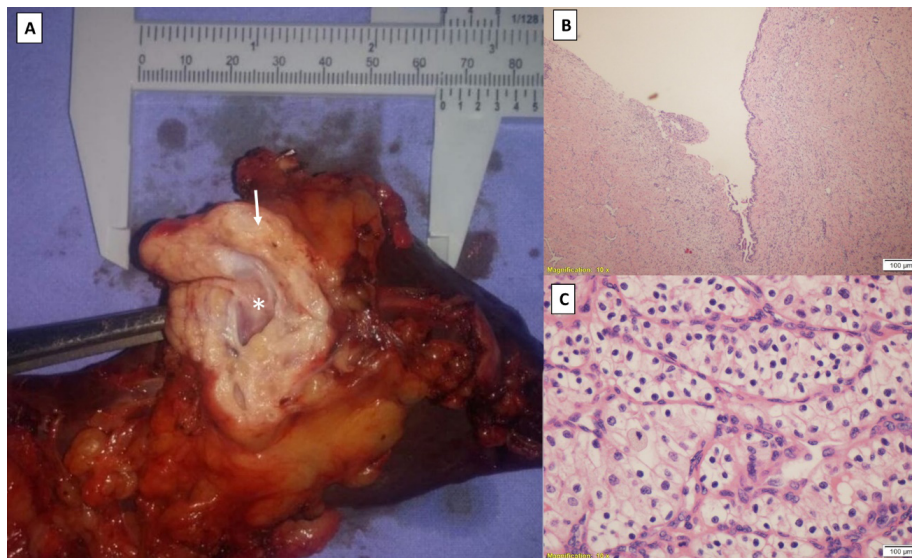


Figure 3: A: Gross specimen: incised pancreas consisting of an empty and multiloculated cavity (*), with smooth inner lining and fibrous walls (arrow); B: Pancreatic monolayer mucosal lining cyst (hematoxylin/eosin staining); C: Clear cell renal cell carcinoma found on tissue dissection on the periphery of the lesion (hematoxylin/eosin staining).

Differential diagnosis included mucinous cystadenoma/cystadenocarcinoma, cystic neuroendocrine tumor, pseudopapillary solid tumor, and metastasis. Only 2% to 5% of all malignancies cause metastasis to the pancreas¹. RCC is more likely to metastasize to the pancreas and can manifest as a solitary or as multiple masses². A collision tumor consists of at

least two types of tumors in the same anatomical site³. We did not find any report in the literature of a pancreatic collision tumor with such characteristics.

Conflicts of interest

The authors declare no conflicts of interest.

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