Revista Española de Enfermedades Digestivas
The Spanish Journal of Gastroenterology

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DOI: 10.17235/reed.2025.11344/2025
Link: PubMed (Epub ahead of print)

Please cite this article as:
Pérez Serena Antonio, Martínez Betancourt Daisy Paola. Colloid carcinoma of the pancreas: a rare entity. Rev Esp Enferm Dig 2025. doi: 10.17235/reed.2025.11344/2025.

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Colloid carcinoma of the pancreas: a rare entity

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Keywords: Colloid carcinoma. Pancreas. Imaging diagnosis. Duodenopancreatectomy.

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Case report

A 64-year-old male presented to the emergency department with nausea and vomiting. An initial pancreatic ultrasound revealed a 3.3 cm lesion in the head of the pancreas. Further evaluation with contrast-enhanced abdominal CT confirmed the presence of the 3.3 cm lesion in the pancreatic head. His medical history was notable for a mild episode of acute pancreatitis one year prior. Endoscopic ultrasound (EUS), with fine-needle aspiration biopsy (FNA), was performed, but yielded insufficient material for a definitive diagnosis. Given the clinical and radiological findings, the patient underwent a cephalic duodenopancreatectomy (Whipple procedure). Histopathological examination of the surgical specimen revealed a 3.2 cm colloid carcinoma (mucinous noncystic carcinoma), with perineural invasion and metastasis in one regional lymph node, classified as stage pT2 pN1. At three months of follow-up, the patient remains stable, without evidence of recurrence.

Discussion.

Colloid carcinoma (mucinous noncystic carcinoma) is a very rare neoplasm, accounting for only 1–3% of exocrine pancreatic neoplasms (1,2). By definition, it is characterized by the presence —in at least 80% of the tumor— of large extracellular stromal mucin pools containing suspended neoplastic cells (WHO). Paradoxically, although perineural invasion and metastases are common findings, it is considered by the WHO a subtype of ductal adenocarcinoma with a favorable prognosis, unless associated with other neoplasms such as intraductal papillary mucinous neoplasm (IPMN) (3). A multidisciplinary approach, with imaging techniques and histological confirmation, is

essential for accurate diagnosis and appropriate patient management.

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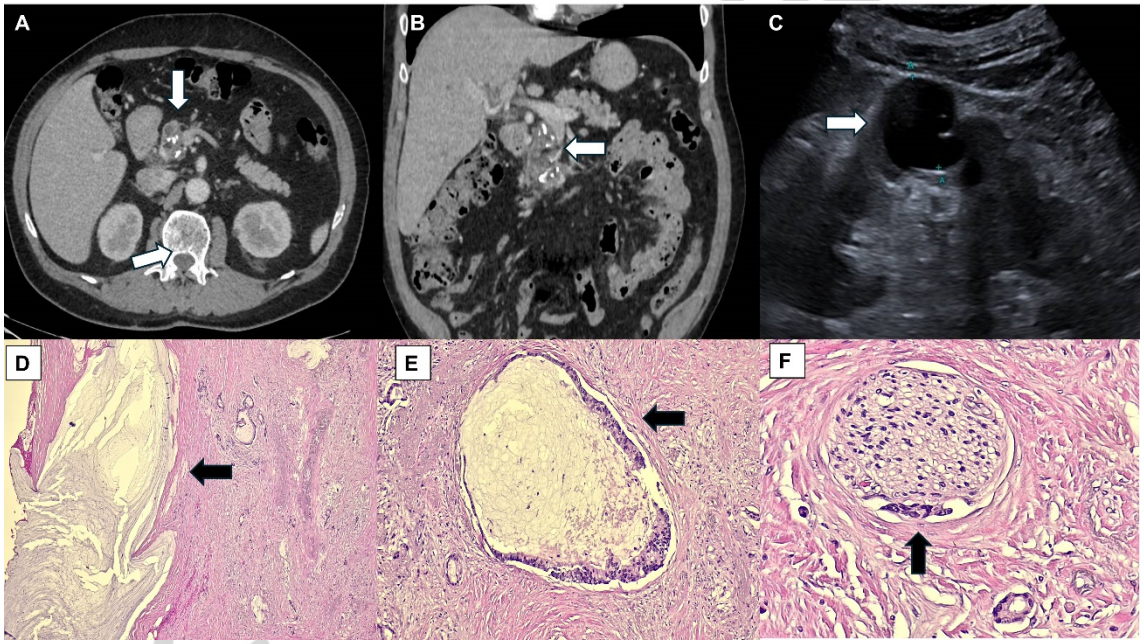

(A) Axial contrast-enhanced CT of the abdomen in a 64-year-old male showing a 3.3 cm hypodense lesion with calcifications in the pancreatic head (arrow), accompanied by dilation of the pancreatic duct and both intrahepatic and extrahepatic bile ducts. **(B)** Coronal view of contrast-enhanced CT showing the same lesion in the pancreatic head (arrow). **(C)** Ultrasound image showing the 3.3 cm lesion (arrow) in the pancreatic

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head. **(D)** In the histological section, large extracellular stromal mucin pools (arrow) characteristic of colloid carcinoma can be observed (H&E,40x). **(E)** Large mucin pools are partially lined by cuboidal to columnar neoplastic cells (arrow) (H&E,100x). **(F)** Perineural invasion is observed (arrow), a common histological finding in this type of neoplasm (H&E,200x).