

A Case of Pancreatic Retention Cyst Mimicking a Cystic Mucinous Neoplasm

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Context An increased number of pancreatic cysts are being diagnosed due to the increased use of cross-sectional imaging and new technologies. Endoscopic ultrasound (EUS)-guided fine needle aspiration (FNA) cytology and molecular analysis of the cystic fluid have led to a better characterization of the pancreatic cysts, but some diagnosis still remain an enigma until surgery. **Case report** We present the case of a 63-year-old female, with no history of pancreatitis, who came to our attention with a pancreatic cyst. An abdominal ultrasound was performed because of abdominal discomfort and a cyst of the pancreatic neck was detected. The patient underwent a CT that confirmed a 4 cm cyst, with thin wall. She underwent a first EUS that revealed a 4 cm cyst with thin septa and thin wall, not communicating with the pancreatic duct. The fluid aspirated under EUS guidance was clear, mildly viscous, and the CEA in the fluid was 1,200 ng/mL. Since the cyst had no clear signs of malignancy, the patient underwent a clinical and radiological follow up and the cyst was stable after one year. During the second year follow up the cyst

was minimally increased. At EUS the wall and the septa were still thin, with no mural nodules. A small calcification was observed on the wall. The pancreatic duct run very close to the cyst, but a communication was not clearly visible and the duct was not dilated. An EUS-FNA was performed and the CEA level was 8,813 ng/mL. The viscosity of the fluid was low, but on the basis of the high level of the CEA a mucinous cystic neoplasm was suspected and the patient underwent a distal pancreatectomy. Surprisingly the final diagnosis was that of a pancreatic retention cyst (PRC). **Conclusion** PRCs typically present as a well-defined, round-shape cystic lesions. They can be associated to different pathologic conditions including pancreatic inflammation and neoplasms. Smooth dilation of upstream pancreatic duct with uncommon communication to the cyst may be helpful for the differentiation. Combination of multiple imaging modalities should contribute to improve the diagnosis, but not always. To our knowledge, there are no cases in literature of PRC with such an high level of CEA.