Letters to the Editor

Acute recurrent pancreatitis due to an intraductal papillary mucinous tumor of the pancreas

Key words: Pancreatitis. Mucinous tumor. Pancreas.

Dear Editor,

Intraductal papillary mucinous neoplasms of the pancreas (IPMN) are characterized by an adenomatous proliferation of pancreatic duct epithelium involving the main pancreatic duct, the branch ducts alone or a combination of both (1,2). IPMN often presents with acute pancreatitis of mild to moderate severity. It has been reported that approximately one-fourth of patients with IPMN experience symptoms including epigastric discomfort and/or pain and backache (3,4).

Case report

A 70-year-old man presented with belt-like radiated epigastric pain and elevated pancreatic enzymes: amylase —876 U/l (N < 160 U/l), lipase— 138 U/l (N < 55 U/l). In his past medical history the patient referred similar recurrent pain episodes and there were two recent acute episodes of mild acute pancreatitis. An abdominal ultrasonography showed a dilated main pancreatic duct (9 mm), confirmed in an abdominal CT scan (Fig. 1). The ERCP demonstrated mucin extruding from the ampulla (Fig. 2) and severe dilation of the main pancreatic duct and secondary branches at the pancreatic head with inner filling defects (Fig. 3). A balloon passage (Extractor Rx Retrieval balloon; Microvasive) was performed to remove the mucin from the main pancreatic duct (Fig. 4), brush cytology was performed and a 10 Fr/6 cm plastic stent (Pancreatic Stent, Olympus) was inserted. The cytology in the main pancreatic duct was positive for malignancy (Fig. 5). An MRCP showed a dilated Wirsung's duct without identifying mural nodules. The patient was diagnosed with a malignant IPMN and underwent duodenopancreatectomy. Histology of the surgical specimen confirmed an IPMN with stromal invasion by an adenocarcinoma in the pancreatic isthmus. After seven months of follow-up the patient remains symptom-free and has no evidence of tumour relapse.

Fig. 1. CT scan showing marked dilation of the main pancreatic duct.

Discussion

IPMN are problematic, both diagnostically and therapeutically, because of the difficulty of preoperative diagnosis, including the determination of malignant transformation and extension of ductal lesions (5). IPMT are most frequently localized in the main duct of the head region of the pancreas (6). Clinical symptoms of IPMN are different from those of the usual pancreatic cancer as one-fourth of the patients have pancreatitis-like symptoms (episodes of epigastric pain and hyperamylasemia) often for many years, especially in patients with mucin-hypersecreting tumors, due to the temporary obstruction of the main pancreatic duct by the viscous mucin (2).

Ranges of imaging techniques are used to diagnose IPMN. Abdominal CT often demonstrates pancreatic duct dilation and cystic structures but cannot delineate the type of cyst (2). ERCP is considered the procedure of choice for initial diagnosis with the hallmark combination of intraductal mucin, mucin extrusion through the papilla and dilation of the main and/or branch pancreatic ducts. MRCP and EUS, which are less-invasive techniques, can identify mural nodules and demonstrate the entire ductal system determining the extent of tumour invasion.

Rui Ramos, Miguel Areia, Albano Rosa, Rui Gradiz,
Paulo Souto, Ernestina Camacho, Hermano Gouveia and
Maximino Correia-Leitão

Fig. 2. ERCP demonstrated mucin extruding from the ampulla.

Fig. 3. ERCP presenting dilation and filling defect in the main pancreatic duct.

Fig. 4. ERCP balloon removal of the mucin.

Fig. 5. Cytological specimen showing carcinoma cells.

*Department of Gastroenterology, Covilha University
Hospital, Coimbra, Portugal*

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