

PICTURES IN DIGESTIVE PATHOLOGY

Obstructive jaundice caused by a pancreaticoduodenal pseudoaneurysm

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CASE REPORT

A 48-year-old male consulted for jaundice and epigastric pain. His personal history included chronic alcoholism and smoking. The patient reported progressive jaundice and epigastric pain over the previous 5 days with no other symptoms. Choloria and acolia were also present. He had experienced no similar episodes previously. Physical examination showed only mucocutaneous jaundice.

Abdominal ultrasound revealed steatosis or chronic liver disease with dilatation of the intrahepatic bile duct, common bile duct and pancreatic duct with no obstructive cause. Aneurysmal dilation of 3.5 cm probably dependent on the superior mesenteric artery branches was also observed. The patient was admitted to hospital.

The day after admission, an abdominopelvic CT scan was performed to determine the origin of the jaundice and to assess the pseudoaneurysm (Fig. 1).

In accordance with these findings, the decision was made to operate by interventional radiology. Selective study of the superior mesenteric artery was performed, where the presence of a pseudoaneurysm was observed depending on the lower pancreaticoduodenal branch, which was anastomosed with the posterior pancreaticoduodenal branch. Different sized microcoils were placed in both branches until complete obliteration was achieved.

After the procedure, the patient improved with progressive depigmentation of the jaundice until its complete disappearance, without any other symptoms, involving an involution of the disease. On the fifth day a control cholangio-RM was performed, which showed a total occlusion of the embolized pseudoaneurysm, with persistence of a discrete compressive effect on the cephalic pancreatic parenchyma and on the bile duct and pancreatic duct. Given the good clinical and radiological evolution, the patient was discharged, to be followed up in the outpatients department.

DISCUSSION

The formation of a pseudoaneurysm is a rare complication of chronic pancreatitis (affecting approximately 10% of patients with a pancreatic pseudocyst) (1). Other causes

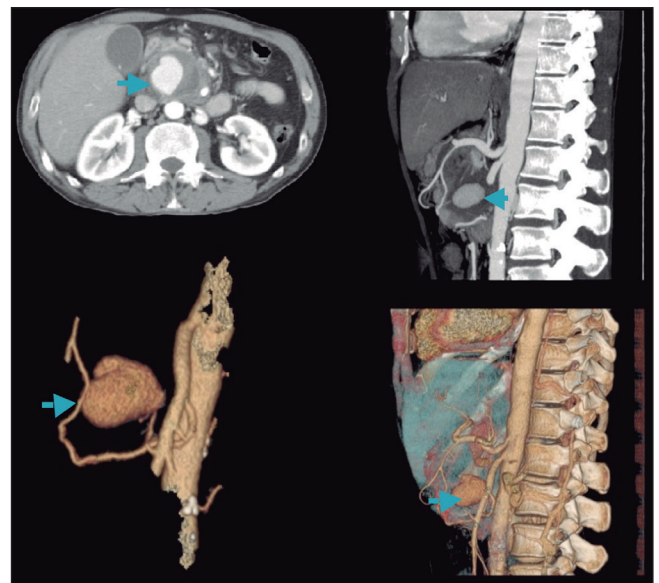


Fig. 1. Abdominal-pelvic CT in arterial and portal phase. Reconstruction in axial, coronal and sagittal axis and 3D. Pseudoaneurysm (arrows) dependent on a branch of the pancreaticoduodenal arcade, probably secondary to previous pancreatitis, leading to an obstruction of the intra- and extrahepatic bile duct and the pancreatic duct. Furthermore, the pseudoaneurysm presents mural thrombus, and other signs previous to rupture.

of pseudoaneurysms are less frequent even though cases are seen in systemic diseases such as polyarteritis nodosa (2). They are also described as postoperative complications following percutaneous procedures or after trauma.

Usually, the affected vessels are in close proximity to the pancreas, which means that the splenic, hepatic, gastroduodenal and pancreaticoduodenal arteries are those most commonly affected.

CT and MR imaging are able to detect the pseudoaneurysm, which appears as a cystic structure in the pancreas, while Doppler ultrasound can be used to show blood flow within the pseudoaneurysm. Mesenteric angiography can confirm the diagnosis, and also provides a therapeutic option by embolization of the pseudoaneurysm, which can be done during the procedure. Embolization is the first treatment option in clinically stable patients (3,4).

The most common complication is bleeding, with a mortality rate of 25-50%, which, if not treated in time, can reach 90% (5). Three clinical features should suggest the possibility of a complicated pseudoaneurysm in the context of chronic pancreatitis: a) unexplained gastrointestinal bleeding; b) sudden expansion of a pancreatic pseudocyst; and c) an unexplained fall in hematocrit.

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