Intrapancreatic accessory spleen

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Patient: 68 years, male

Clinical History:

We report a case of a pancreatic mass treated by laparotomic resection of the pancreatic tail with conservation of the spleen. The mass mimics radiologically a hypervascular pancreatic tumor.

Imaging Findings:

A 68 years old man underwent laparoscopic cholecystectomy for biliary stone disease. Some weeks after surgery he suffered from recurrent crisis of abdominal pain. A MRCP examination showed normal bile ducts, but MRI demonstrated a small ovoid mass in the pancreatic tail. The axial diameter of the mass was about 2 cm, with a low signal intensity on T1-weighted images and a high signal intensity in T2-weighted images (Fig. 1). An additional CT study confirmed the presence of the mass that appeared to have a precontrast density and a contrast enhancement similar to the spleen (Fig. 2-4). There were no focal hepatic lesions. Neoplastic markers, insulin and gastrin serum levels were normal. A non functional islet cell tumor was suspected. In order to exclude malignancy the patient underwent a distal pancreatectomy. Histological examinations yielded normal spleen tissue and the final diagnosis was accessory spleen.

Discussion:

Accessory spleens occur in about 10% of the population and are usually located near the splenic hilum. In very few cases accessory spleens are found within the pancreatic tail where the diagnosis may be difficult; they are often confused with islet cell tumors or other pancreatic neoplasms. The diagnosis must be considered when an intrapancreatic mass exhibits on CT a precontrast density and contrast enhancement or on MRI a signal intensity similar to the spleen. An accessory spleen can be differentiated from an intrapancreatic neuroendocrine neoplasm by performing a 99mTc HDRBC (heat damaged red blood cells) SPECT. This tracer is taken up in normal liver and spleen tissue, so the evidence of focal pancreatic uptake suggests the presence of an intrapancreatic spleen. According to the literature SPIO-enhanced MRI shows on T2-weighted images a significant signal intensity drop of intrapancreatic accessory spleens similar to the spleen. Moreover, as MRI offers a superior spatial resolution than scintigraphy, SPIO-enhanced MRI might provide a correct diagnosis when scintigraphy cannot.

Differential Diagnosis List: Intrapancreatic accessory spleen

Final Diagnosis: Intrapancreatic accessory spleen.
References:

Description: RM: T1 weighted axial Origin:
Figure 2

a  Description: T2-weighted axial MRI
Origin:

b  Description: T2-weighted axial MRI
Origin:
**Figure 3**

**Description:** Precontrast axial CT

**Origin:**
Figure 4

Description: Postcontrast axial CT

Origin:
Description: Postcontrast axial CT

Origin:
Figure 5

Description: Coronal CT reconstruction

Origin: