

Cartas al Director

Lipoma of the pancreas: diagnosis and management of these rare tumors

Palabras clave: Lipoma. Tumores benignos del páncreas. Páncreas.

Key words: Lipoma. Bening tumors of the pancreas. Pancreas.

Dear Editor:

Nonductal pancreatic tumors are uncommon, accounting for 5% to 15% of all pancreatic neoplasms and include mesenchymal tumors which represent only 1% to 2% of all pancreatic neoplasms (1). Lipomas of the pancreas are benign mesenchymal tumors, are uncommon in this location (2). There are only sixteen published in the literature at the moment; most of them are diagnosed incidentally on CT scan or Ultrasonography (1-9).

We report the case of a patient with acute pancreatitis, and in the radiological studies we find incidentally a lipoma of the pancreas.

Case report

A 70-year-old woman presented epigastric pain, radiated to the left and right upper quadrant of the abdomen, vomits and hyperamylasemia. Physical examination was normal.

Abdominal Ultrasonography (US) showed a 3,8 x 2,7cms, round, solid, hypoechoic mass in the head of the pancreas; there was no biliary tract or pancreatic duct obstacle.

Computed Tomography (CT) demonstrated a 3 x 3 cms homogeneous, hypodense, polilobed mass, well circumscribed, and non-invasive, with a density of 100 HU which translate the fatty composition of the mass. There was no ductal dilatation and no biliary tract obstacle (Fig. 1).

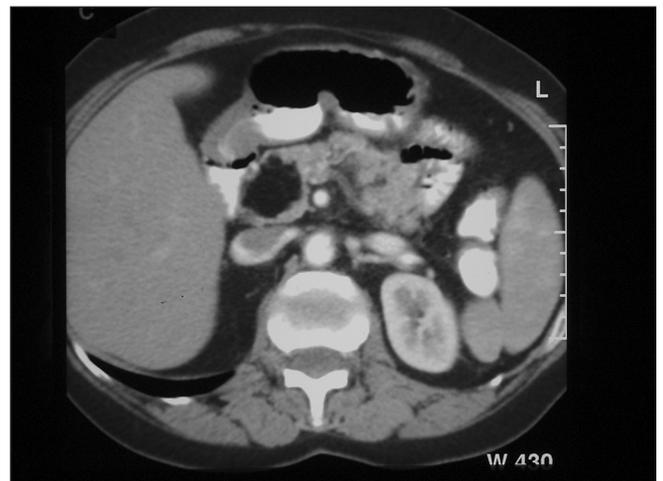


Fig. 1.-

In the Magnetic Resonance (MR) there was an ovoid, hyperintense, homogeneous, focal mass in the head of the pancreas, with a diameter of 3 x 3 cm. On standard T1- and T2- weighted images. The mass was isointense with the intraabdominal and subcutaneous fat on both T1- and T2 weighted images and was found to be homogeneously suppressed on frequency selected fat-suppression images. There was no contrast enhancement after the use of gadolinium-DTPA.

After the episode of acute pancreatitis the patient kept asymptomatic, without abnormal findings of liver function tests, so we decided not to do an histological confirmation because the CT diagnosis is very specific, and we made a conservative management. The evolution was good; in the US, 3, 6, 12 and 24 months later there were no changes.

Discussion

The lipomas of the pancreas are very rare. Only sixteen cases have been reported in the literature (1-9). Bigard, in 1989, described the first case (3) (Table I).

In our case the diagnosis was made with US, CT and MR;

Table I. Reported cases of pancreatic lipoma

Reference	Nº of cases	Gender and age	Tumor size(s) (cm)	Location in pancreas	Symptoms abnormalities	Radiographic	Procedure	Pathology	Complications
Bigard (1989)	1	F-63	3,3	Head	LUQ pain	US-hypoechoic mass in pancreatic head	Whipple	Lipoma	Pancreatic fistula
De Jong (1993)	1	NA-NA	5	Head	NA	NA	Exploratory laparotomy intraoperative biopsy, biliary by-pass	Lipoma	None
Bogliolo (1993)	1	NA-11 mo	20 x 30	Tail	None (incidental in laparotomy)	None US-hypoechoic mass in pancreatic head;	NA Enucleation	Lipoma Lipoma	NA None
Merly (1996)	1	F-70	4	Head	RUQ,LUQ pain, back pain, nausea	splenic vein compression CT-mass displaced, partially compressed CBD			
DiMaggio (1996)	1	F-70	NA	Head	Epigastric pain, back pain	US-Hypoechoic mass in pancreatic head CT-mass; displaced pancreatic parenchyma Compressed PV,SMV	NA	Lipoma	Pancreatic fistula
Katz (1998)	4	4M-45,75	1,4-5,3	Head (3) Body-tail (1)	None NA	CT- varied appearance US,CT-varied appearance	None None	None None	NA NA
Itai (1998)	5	4F,1M-49,84	0,4-0,3	Neck (3) Body (1) Tail (2)					
Secil (2001)	1	M-64	1	Tail	NA	MR-focal mass in the tail of the pancreas	NA	NA	NA
Raut (2003)	1	F-69	12 x 12 x 5	Head/neck	Abdominal pain	CT- hypoechoic mass in pancreatic head/neck	Whipple	Lipoma	None
Present report (2005)	1	F-70	3,8 x 2,7	Head	Epigastric pain and hiperamilasemia	US,CT,MR- mass in the head of the pancreas	None	None	NA

NA: not available; RUQ, LUQ: right, left upper quadrant; CT: computed tomography; US: ultrasound; MR: magnetic resonance; ERCP: endoscopic retrograde cholangiopancreatography; CBD: common bile duct; PV: portal vein; SMV: superior mesenteric vein.

above all CT bring us the most exact radiological diagnosis and it has been proposed to be the method of choice for the detection of a fat containing lesions of the pancreas (4), the values ranging from 80 to 120 HU indicate a lesion composed of fat (2). CT can readily detect these lesions, like the other fat containing abnormalities of the pancreas and no further examinations are indicated (2, 4-7). MR imaging may be helpful in the differentiation between the fatty replacement of the pancreas, (which is one of the most common histological changes observed in the pancreas) and the lipoma of the pancreas (4), the two entities have similar densities (Hounsfield Units) but the difference is that the lipoma of the pancreas is an encapsulated, septated, fatty mass surrounded by pancreatic parenchyma, well circumscribed and non-invasive, and fatty replacement is more infiltrative and growth along fascial planes (1). Lipomas should be distinguished too from Liposarcoma, they are characterized by higher densitometric values (HU) by greater size, by areas of solid or fluid densities, and by blurred outlines (1). Another entity is the Lipomatous pseudohypertrophy characterized

by enlarged pancreas with massive replacement of pancreatic exocrine tissue by adipose tissue (1). In conclusion, CT is an essential diagnosis tool in a case of intrapancreatic lipoma (2).

After the episode of acute pancreatitis our patient kept asymptomatic so the management was conservative (1-9). Only Raut et al. (1) approach into the management of symptomatic lipoma, they defend that may be treated with enucleation if the tumors are amenable and a Whipple procedure, distal pancreatectomy, or palliative by-pass surgery if the enucleation is not possible; the current low morbidity and mortality rates associated with pancreatic resection justify this approach even with foreknowledge of the benign nature of this lesion.

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