

Case	(057) Groove pancreatitis. diagnostic keys
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CASE PRESENTATION

A 42-year-old woman with thrombophilia and hypercysteinemia, smoker and alcohol drinker, consulted in emergency department with epigastric pain, postprandial vomiting and weight loss of 5 months of evolution. The analytical study showed mild hyperamylasemia.

The abdominopelvic multiphase CT scan showed a mass between duodenum and pancreas, with mild contrast uptake and no dilatation of biliar ducts or pancreatic duct. A high digestive endoscopy visualized thickening of the duodenal wall. The result of biopsy was fibrosis.

The final diagnosis was groove pancreatitis. The subsequent CT scans showed alternating periods of improvement and worsening.

DISCUSSION

The pathogenesis of groove pancreatitis is unclear, postulating an anatomical or functional obstruction of the minor papilla (which would explain the finding of hyperplasia of Brunner's glands and stasis of pancreatic juice). The cystic changes in the duodenal wall appear up to 49%.

Histologically there is a scar process with a lymphocytic infiltrate.

Clinical manifestations include abdominal pain, weight loss, postprandial vomiting and nausea often with jaundice.

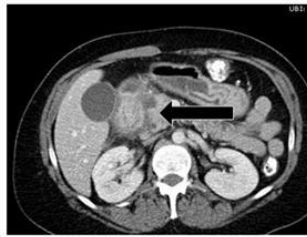
Complications have been described, such as upper gastrointestinal bleeding, perforation, recurrent pancreatitis, duodenal stenosis and a mild increased risk for pancreatic cancer. Abdominal CT should be performed with contrast in pancreatic and venous phase. The typical findings are a hypodense mass with mild enhancement between the pancreatic head and the duodenal wall.

The visualization of cysts of the duodenal wall is a very useful to distinguish it from pancreatic carcinoma. Unlike carcinoma, there is no involvement of peripancreatic vessels. Sometimes it can be seen a dilation of the common bile duct, but always with benign morphology (progressive distal sharpening). In MRI the most characteristic finding is a leaf-shaped mass between duodenum and pancreas with thickening of the duodenal wall, hypointense in T1 and variable in T2 (hyperintensity if there are cyst). Shows peripheral enhancement with progressive centripetal filling. The differential diagnosis includes mainly pancreatic adenocarcinoma, duodenal cancer, cholangiocarcinoma, acute phlegmonous pancreatitis, neuroendocrine tumors of the pancreaticoduodenal groove and cystic duodeno dystrophy.

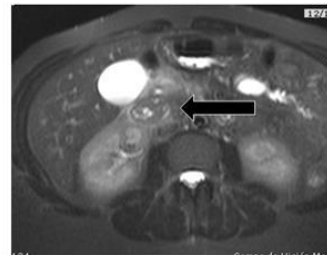
Cystic dystrophy of the duodenal wall presents cysts originating in an ectopic pancreatic tissue and they could be parts of the same clinical spectrum. The treatment of groove pancreatitis is conservative, and cephalic pancreaticoduodenectomy for refractory cases.

CONCLUSION

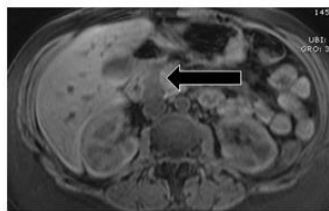
The groove pancreatitis should be considered in fibrotic-type processes of the pancreaticoduodenal space without signs of malignancy (absence of vascular infiltration and sudden stop in the main bile duct and pancreatic duct) and with typical findings of cystic dilatations and thickening of the duodenal wall.



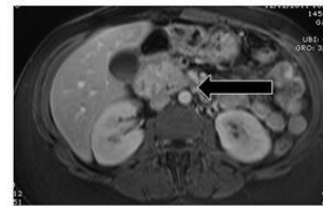
MDCT venous phase: Hypodense image crescent-shaped in duodenal pancreatic groove



Axial STIR: cystic lesions in the duodenal Wall (hyperintense)



Axial T1w 3D fat saturation without contrast: hypointense crescent-shaped area in pancreaticoduodenal groove



Axial T1w 3D fat saturation with contrast (venous phase): moderate enhancement

BIBLIOGRAPHY

- Irie, H. Honda, H. Kuroiwa, T. MRI of groove pancreatitis. J Comput Ass Tomogr 22(4): 651-55
- Raman SP, Salaria SN, Hruban RH. Groove pancreatitis: spectrum of imaging findings and radiology-pathology correlation. AJR 2013 Jul; 201(1):W29-39