Imaging Findings of Autoimmune Pancreatitis

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Imaging findings of autoimmune pancreatitis is fairly characteristic. In appropriate clinical setting, a constellation of imaging features is very helpful in the diagnosis of autoimmune pancreatitis. The abnormal findings are reversible with steroid therapy and thus imaging can be used as an evaluation of treatment response.

CT findings are diffuse enlargement of the entire pancreas with homogenous texture. The normal tiny cysts or serration along the pancreatic is lost and becomes smooth. The enlarged pancreas is covered by a thin, low density rind and the surface is pencil sharp. In some patients, there may be peripancreatic stranding and thickening of renal fascia. Not infrequently there may be focal or segmental involvement and the involved pancreatic segment is enlarged mimicking a pancreatic mass. There is no calcification, peripancreatic fluid collection or vascular involvement. Sonography shows diffuse homogenous enlargement of the pancreas.

MR imaging shows diffuse enlargement with rim enhancement. MRCP reveals diffuse narrowing and minute pancreatic duct irregularity along the main pancreatic duct. Sometimes, there may be a focal structure.

ERCP shows characteristic diffuse narrowing with irregularity or serration along varying segment of the main pancreatic duct. Focal stenosis may be present. The intrapancreatic segment of the common bile duct may be focally or segmentally narrowed and the proximal bile ducts are dilated. Infrequently the proximal extrahepatic ducts or intrahepatic bile ducts may be involved resulting in various degree of narrowing.

These abnormal findings are resolving with steroid therapy and become completely normal.

REFERENCES