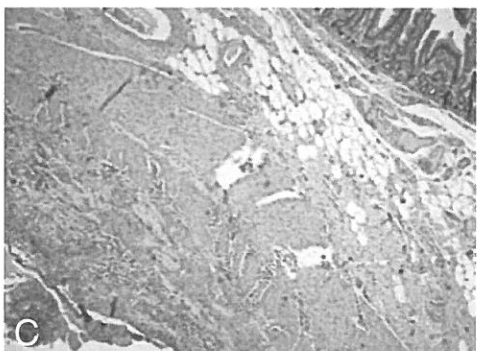
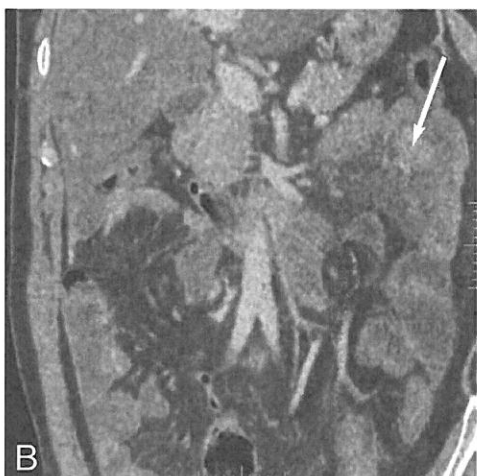
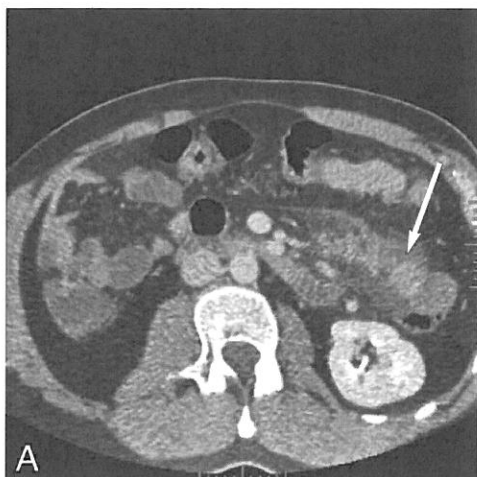


IMAGES IN CLINICAL RADIOLOGY



Heterotopic pancreatitis causing confusion in small bowel tumor

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A 39-year-old man was admitted to our hospital for acute epigastric pain with nausea and vomiting. Physical examination was suggestive for acute abdomen without peritoneal irritation findings. Blood tests results were as follow: alanine aminotransferase (ALT): 87 U/L, aspartate aminotransferase (AST): 55 U/L, amylase: 135 U/L, lipase: 69 U/L, total bilirubin: 11,6 mg/l, creatinine: 9 mg/l, C-reactive protein (CRP): 108,4 mg/L, and white blood cells (WBC): 14640/mm³.

A contrast-enhanced computed tomography (CT) scan of the abdomen was performed, including a reformatted image in the axial plane (Fig. A) and a reformatted image in the coronal plane (Fig. B) and revealed an ovoid soft-tissue mass depending on jejunal wall with homogeneous enhancement (arrows). A short segment of a bowel loop was asymmetrically thickened, with surrounding mesenteric edema and mesenteric lymph nodes. Abdominal ultrasound (US) confirmed the above-mentioned description and showed an ovoid soft-tissue mass at the expense of the jejunal wall. The Doppler-US showed vascularization of the ovoid mass.

The diagnosis of the jejunal tumor (probably gastrointestinal stromal tumor or lymphoma) was suggested. A laparoscopy was performed and revealed a mass which was removed and a short bowel segment was resected. Frozen sections (Fig. C) demonstrated ectopic pancreas infiltrating the mesentery and the jejunal wall to the submucosa with signs of pancreatitis.

Comment

Heterotopic pancreas is a congenital anomaly defined as pancreatic tissue in aberrant location lacking anatomic, ductal and vascular continuity with the eutopic gland. The origin of heterotopic pancreas is controversial. However the most accepted theory speaks of a separation during the endodermal embryogenic invagination of the primitive duodenal wall. The heterotopic tissue remains incorporated into the upper gastrointestinal tract within the bowel wall.

The common sites of heterotopic pancreas are the duodenum, gastric antrum, jejunum and ileum. Jejunal location has been reported with an incidence of 16 to 35% and manifests as a submucosal or rarely as a subserosal mass.

In uncommon cases, heterotopic pancreas has been found in the oesophagus, mediastinal teratoma, gallbladder, omentum, spleen, fallopian tubes, lymph nodes, jejunal diverticulum and Meckel's diverticulum.

Although most cases of heterotopic pancreas are asymptomatic, non specific gastrointestinal symptoms have been described in 30-40%. The clinical signs are epigastric pain (77%), tarry stools (24%), vomiting (18%) or diarrhea (18%).

Complications include mechanical obstructions, cyst degeneration, gastrointestinal bleeding, pancreatic cancer or acute pancreatitis. Those complications are the same as those for the eutopic pancreas.

Reference

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