

# An unusual gastric tumour

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**H**eterotopic pancreas, pancreatic tissue lacking anatomic and vascular connection with the parent organ and lying outside its normal location, is uncommon, said to be encountered in 1 in 500 laparotomies involving the upper abdomen and reported in 0.6%–14% in autopsy series.<sup>1</sup> Generally it is seen in association with the upper gastrointestinal tract, with 90% of cases occurring in the stomach, duodenum or upper jejunum.<sup>1</sup> Most cases noted at operation were asymptomatic and found incidentally.<sup>1</sup> Symptomatic lesions are less common, and correct preoperative diagnoses are unusual, partly because imaging and upper abdominal endoscopy often produce non-specific findings.<sup>2,3</sup> We present a case of symptomatic gastric heterotopic pancreas with unusual radiographic findings.

## Case report

A 54-year-old generally healthy woman was referred with mild epigastric discomfort. Findings on physical examination were normal. Upper gastrointestinal examination showed a gastric filling defect. Ultrasonography showed a 7 × 5 × 5-cm mural mass, and the diagnosis of leiomyoma was suggested. CT scan (Fig. 1) confirmed a localized mass arising from the posterior wall of the stomach that was slightly enhancing on intravascular administration of contrast medium. Its appearance was heterogeneous with cystic changes and central clustering of coarse calcifications. Findings were thought to be suspicious for gastrointestinal stromal tumour. Endoscopy revealed a submucosal mass with 2 areas of overlying ulceration. Biopsy specimens

were mucosal, negative for malignancy and thought to be most consistent with a benign submucosal tumour.

Because we could not rule out malignant disease with certainty, the patient underwent local (transgastric) resection of the mass and surrounding gastric wall through a short upper midline incision. Her postoperative course was uncomplicated, and she was asymptomatic at early follow-up.

The pathological diagnosis was unexpected: heterotopic pancreas with focal acute inflammation. Gross examination

revealed a 5 × 4.5 × 3.5-cm intramural mass with multiple cystic areas and foci of calcification. Microscopic examination revealed heterotopic pancreatic tissue within the gastric muscularis, composed of groups of exocrine acini and ducts. Pancreatic islets were absent. There was focal acute inflammation with abscess formation but no neoplastic change.

## Discussion

Heterotopic pancreas arises during embryologic development. von Heinrich<sup>4</sup>



**FIG. 1.** CT image showing the calcifying mass arising from the posterior wall of the stomach.

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## Note de cas

identified 3 types: type 1 containing ducts, acini and islets; type 2 containing ducts with acini (our case); and type 3 containing principally ducts. Most are asymptomatic but epigastric discomfort, vomiting and anemia have been seen — symptoms are associated with larger lesions and those with ulceration.<sup>5</sup>

Inflammatory change and malignant degeneration have been described, and calcification appears to be uncommon.<sup>2,6,7</sup> With upper gastrointestinal contrast studies and endoscopy, the characteristic findings of a smooth filling defect with central indentation or umbilication are often not found, and a CT review of gastric pancreatic heterotopia demonstrated nonspecific findings and a correct preoperative diagnosis was reached in only 2 of 12 cases.<sup>3</sup>

We present this case as one of hetero-

topic pancreas involving the stomach. The resected lesion was unusual in that it measured 5 cm, which is large, and displayed calcification, which is uncommon. Our principal aim is to draw the attention of surgeons to this unusual diagnosis in mass lesions of the stomach. At no time before the final pathological assessment was any diagnosis other than benign or malignant neoplasm seriously entertained.

**Competing interests:** None declared.

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