## —Images and Videos—

# Intraductal papillary mucinous neoplasms from a pancreas rest (with video)

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A 29-year-old male, who has been experiencing abdominal pain for 20 days, was admitted to our hospital. The patient had no notable medical history. Physical examination revealed a tenderness in his upper abdomen. Initial laboratory tests showed a blood amylase level of 297 U/L (normal: 35-135 U/L). Computed tomography (CT) revealed a 4 cm  $\times$  5 cm cystic lesion in the stomach wall [Figure 1a]. EUS confirmed it to be an intramural cystic lesion in the gastric antrum region. It appeared to be a separate, anechoic structure with hypoechoic solid nodules [Figure 1b and c]. We punctured the lesion with a 22-G needle (EchoTip ProCore; Cook Medical, Bloomington, Indiana, United States) and collected the cystic fluid from the cyst and a specimen from the solid part [Video 1]. Three mL of thick fluid with 492 ng/mL of carcinoembryonic antigen (CEA) and 16 U/L of amylase was aspirated. Some lymphocytes,

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monocytes, and neutrophils were observed during cytological examination. Histopathological analysis of the specimen showed pancreatic tissue in the lesion [Figure 1d and e]. We recommended that the patient should undergo surgery. The large protuberant lesion with a small depression on the surface was observed in the gastric wall during the operation [Figure 2a-c]. Pathological results after the surgery confirmed the final diagnosis as ectopic pancreas with intraductal papillary mucinous neoplasms (IPMN) and mild-to-moderate dysplasia [Figure 2d-f]. Follow-up CT and blood test 1 month later showed no abnormalities and the patient's symptoms disappeared.

IPMNs are common cystic neoplasms of pancreas cystic lesions, but rare in ectopic pancreas.<sup>[1]</sup> Pancreatic tissue was observed in the patient's specimen extracted by EUS-FNA,<sup>[2]</sup> leading to the diagnosis of ectopic pancreas with

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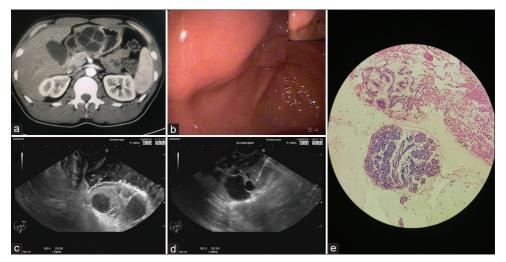
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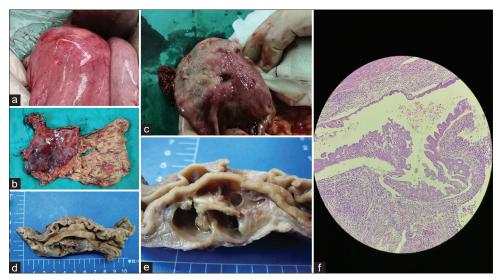
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**Figure 1.** (a) Abdominal computed tomography scan revealed a 4 cm × 5 cm cystic lesion located in the stomach wall. There was a septum in the lesion. (b) A huge submucosal lesion can be seen in the antrum. (c) EUS revealed an intramural cystic lesion in the gastric antrum region with a septum and the hypoechoic solid structure within the anechoic area. (d) EUS-FNA using a 22-G needle was performed to collect cystic fluid and a specimen from the solid part. (e) Histopathological analysis confirmed the diagnosis of a gastric ectopic with pancreatic cystic lesion



**Figure 2.** (a-c) During the operation, the large protuberant lesion was observed in the wall of the stomach during the operation. There was a depression on the surface of the lesion. (d and e) After the resection, multiple cysts with protuberant papillary structures were found in the lesion. (f) At high magnification, the epithelium on the wall of the sac showed atypia with an enlarged nucleus and nuclear and cytoplasmic ratio imbalance

cystic lesions. According to the standard treatment course for pancreatic cystic lesions, when the CEA level in the blood is higher than 192 ng/mL and the cystic lesion is larger than 3 cm,<sup>[3,4]</sup> surgery is recommended since IPMN is a precancerous lesion.<sup>[5]</sup> In our case, EUS-FNA indicated a need for further surgery, and thus, the final diagnosis was achieved.

### Declaration of patient consent

The authors certify that he has obtained all appropriate patient consent forms. In the form the patient has given his consent for his images and other clinical information to be reported in the journal. The patient understands that his names and initials will not be published and due efforts will be made to conceal his identity, but anonymity cannot be guaranteed.

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### Conflicts of interest

There are no conflicts of interest.

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