

A case of mucinous cystadenocarcinoma of the pancreas with spontaneous rupture diagnosed by endoscopic retrograde pancreatography

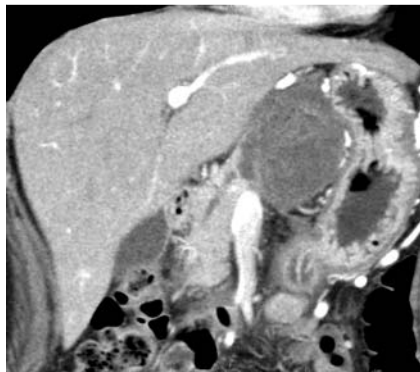


Fig. 1 Computed tomography shows the presence of a low-density mass in the pancreatic body that communicates with a dilated main pancreatic duct.

Mucinous cystic neoplasm (MCN) of the pancreas is characterized by a multilocular cystic lesion lined by mucin-producing columnar epithelium and an ovarian-type stroma [1]. MCNs are often found incidentally and may occasionally cause symptoms. Rupture of a pancreatic MCN is a rare complication, and only a few cases have been reported to date [2–5]. Many of these cases occurred during pregnancy [2,3,5]. This report is the first to describe a case of ruptured MCN with an associated invasive carcinoma of the pancreas diagnosed by endoscopic retrograde pancreatography (ERP).

In a 69-year-old woman complaining of abdominal pain, contrast-enhanced computed tomography (CT) showed a low-density mass 60 mm in diameter that communicated with a dilated main pancreatic duct (▶ **Fig. 1**). Contrast-enhanced endoscopic ultrasound (EUS) revealed a mixed-echo pattern in the mass and enhancement effects in hyperechoic areas (▶ **Fig. 2**). The findings on CT, EUS, and magnetic resonance imaging (not shown) suggested that the tumor was a multilocular cystic lesion of the pancreas with solid components, but they were atypical, and a diagnosis could not be reached. ERP was then performed and showed leakage of contrast medium from the main pancreatic duct into the peritoneal cavity (▶ **Fig. 3**). CT images obtained immediately after ERP showed pooling of contrast medium in



Fig. 2 Contrast-enhanced endoscopic ultrasound shows a mixed-echo pattern in the mass and enhancement effects in hyperechoic areas.



Fig. 3 Endoscopic retrograde pancreatography shows rupture of the tumor. Leaked contrast medium from the main pancreatic duct is pooling around the intestinal tract. Scale bar: 1 cm.

the peritoneal cavity around the tumor (▶ **Fig. 4**). A body-tail pancreatectomy with splenectomy was performed quasi-emergently 5 days after ERP. The definitive pathological diagnosis was mucinous cystadenocarcinoma of the pancreas with foci of ovarian-like stroma (▶ **Fig. 5**). After surgery, the patient underwent chemotherapy with 5-fluorouracil and has remained symptom-free, with no detectable

tumor recurrence at present, 2 months after surgery.

To the best of our knowledge, this is the first report of MCN of the pancreas with spontaneous rupture diagnosed by ERP.

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Competing interests: None



Fig. 4 Pooling of contrast medium is seen in the peritoneal cavity around the tumor.

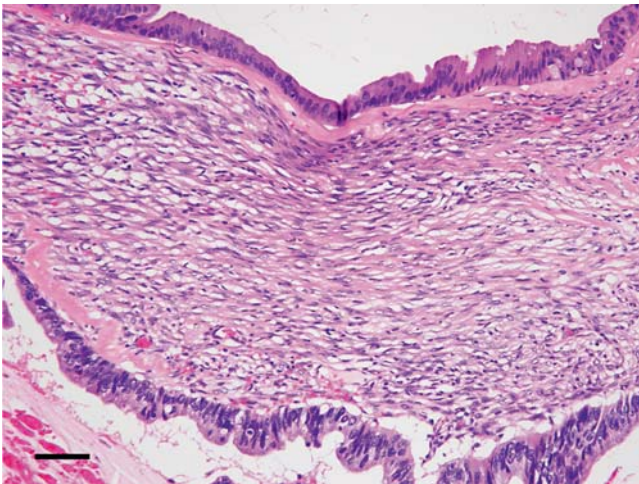


Fig. 5 Histological sections showed thickened mucinous epithelium and ovarian-type stroma (hematoxylin and eosin; magnification $\times 200$). Scale bar: 50 μm .

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