—Images and Videos—

Contrast-enhanced endoscopic ultrasonography features of a mucoepidermoid carcinoma of the pancreas

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Mucoepidermoid carcinoma was first described in 1945 as a separate entity of salivary gland tumor.^[1] It is most commonly seen in salivary glands; however, mucoepidermoid carcinoma of the pancreas is an extremely rare entity which has been reported on only four cases in English literature.^[2-5] Because of the rarity of mucoepidermoid carcinoma of the pancreas, the imaging features of the tumor have not been revealed, and all previous reports have not illustrated endoscopic ultrasound (EUS) findings.

A 67-year-old woman was presented to us with postprandial upper abdominal pain. Contrast-enhanced magnetic resonance imaging revealed a 2 cm mass in the pancreatic body with ring enhancement pattern and multiple liver metastases. Subsequent magnetic resonance cholangiopancreatography showed a narrowing of the main pancreatic duct without upstream dilatation and cystic components of the mass. EUS confirmed a hypoechoic mass with irregular margins and cystic components, which had slightly higher internal echoes with nonshadowing blurred hyperechoic foci [Figure 1]. Contrast-enhanced EUS using Sonazoid (Daiichi Sankyo, Tokyo, Japan) showed that the mass had hyperenhancement, not so much strong as pancreatic

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Figure 1. Endoscopic ultrasound image showing a hypoechoic mass with cystic components which had slightly higher internal echoes than that of ductal adenocarcinoma

neuroendocrine tumors, compared with the surrounding pancreatic tissue [Figure 2]. Moreover, unlike pancreatic ductal adenocarcinomas, the hyperenhancement lasted even after 60 s [Video 1]. EUS-guided fine-needle aspiration using a 19-gauge needle was performed, and three enough specimens were obtained. All the biopsy

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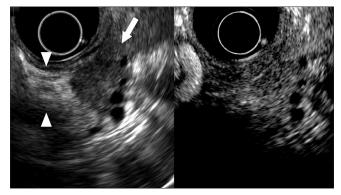


Figure 2. Contrast-enhanced endoscopic ultrasound image showing a hyperenhancement of the mass (arrow) compared with the surrounding pancreatic tissue (arrowheads)

specimens showed three types of cells: mucin-producing cells, epidermoid cells, and intermediate cells, thus confirming a diagnosis of mucoepidermoid carcinoma.

To our knowledge, this is the first report of a mucoepidermoid carcinoma of the pancreas with associated EUS imaging features. Based on our case, the tumor was depicted as a hypoechoic mass with slightly higher internal echoes in EUS and was remarkable for its prolonged hyperenhancement in contrast-enhanced EUS.

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