ACG CASE REPORTS JOURNAL

IMAGE | PANCREAS

Primary Pancreatic Chondrosarcoma

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CASE REPORT

A 40-year-old man with a 6-month history of recurrent abdominal pain and 20-kg weight loss was referred to our department. His serum lipase level was elevated at 130 U/L (reference range 13–60 U/L), but his amylase level was normal. Transabdominal ultrasound revealed a solid-cystic mass at the pancreatic head. Radial endoscopic ultrasound (EUS) showed a 29.9 × 32.7-mm nonhomogeneous hypoechoic mass with dilation of common biliary duct and tortuousness of main pancreatic duct (Figure 1). A network structure and hypoechoic nodules were observed at the inner cystic wall and edge, respectively (Figure 1). Specimens from EUS-guided fine-needle aspiration revealed an apparent cartilage tissue, in which small round or spindle-shaped cartilage cells and islets of differentiated cartilage could be observed (Figure 2). The specimens were positive for CK (+), P53 (partially +), CK5/6 (partially +), Ki-67 (60% +), S100 (+), and actin (+), and they were negative for P63 (−), HMB45 (−), and myoglobin (−). The pathological diagnosis was primary pancreatic chondrosarcoma. After diagnosis, a Whipple procedure with contrast-enhanced harmonic EUS (CE-EUS) revealed a solid mass with hypo-enhancement until the third follow-up at 2 years postsurgery. The pathological diagnosis after the second surgery confirmed the recurrence.

Primary pancreatic chondrosarcoma is a rare disease that poses a diagnostic and therapeutic dilemma for treating clinicians. To date, only 2 cases of primary pancreatic chondrosarcoma have been described in the literature, and there is no definitive guideline.[1,2] This patient represents a case of primary pancreatic chondrosarcoma with a 6-month history of recurrent abdominal pain and 20-kg weight loss.

This is the first case of primary pancreatic chondrosarcoma described with EUS. Furthermore, the image features of this patient were unique. According to the 2 previous case reports, primary pancreatic chondrosarcoma manifests radiologically as a large tumor mass of mixed density with chondroid calcifications on computed tomography.[1,2] Our case presented with a

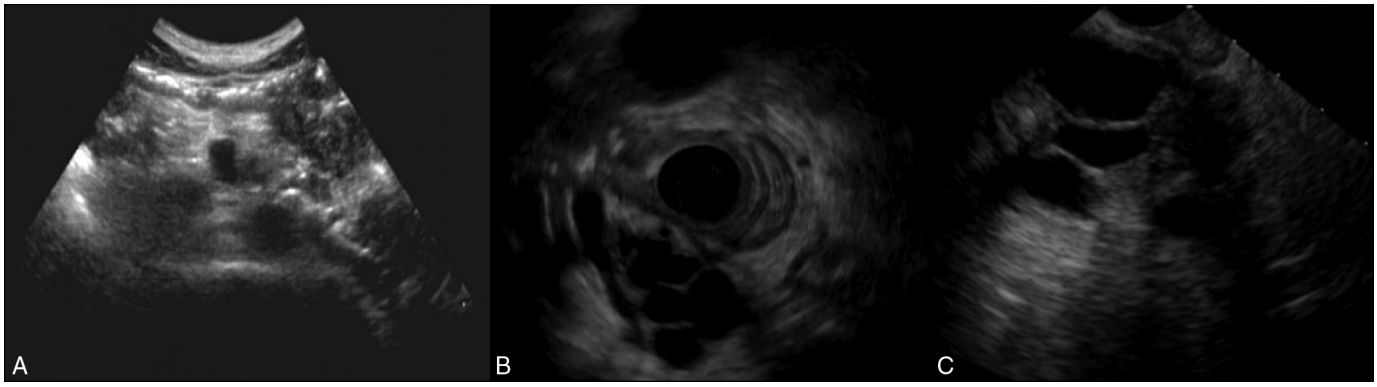

Figure 1. (A) Transabdominal ultrasound revealing a solid-cystic mass at the pancreatic head. (B) Endoscopic ultrasound indicating a 29.9 × 32.7-mm nonhomogeneous hypoechoic solid-cystic mass detected at the pancreatic head. (C) Network structure and hypoechoic nodules.

ACG Case Rep J 2018;5:e61. doi:10.14309/crj.2018.61. Published online: August 29, 2018.

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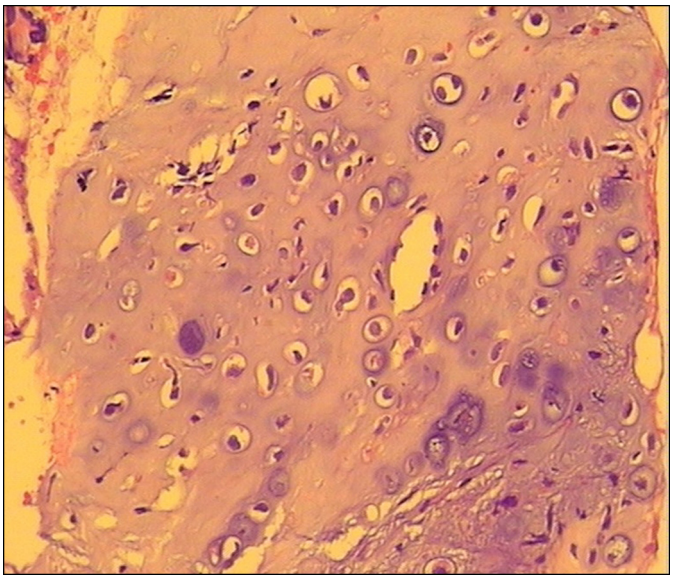

Figure 2. Small, round or spindle-shaped cartilage cells and islets of differentiated cartilage (hematoxylin and eosin, ×100).

solid-cystic mass rather than a solid mass, and there was no apparent sign of calcification. In addition, EUS revealed that the visible internal network structure and hypoechoic nodules in cystic lesion connected with the pancreatic duct.

Although exceedingly rare, primary pancreatic chondrosarcoma should be taken into consideration in the differential diagnosis of all solid and even partially cystic pancreatic lesions. Radical operative resection is the primary treatment of choice when applicable, and follow-up is necessary due to the high rate of recurrence. EUS could offer precious information for differential diagnosis and follow-up visits.

DISCLOSURES

Author contributions: Both authors contributed to the manuscript. W. Qiao is the article guarantor.

Financial disclosure: None to report.

Informed consent was obtained for this case report.

Received October 9, 2017; Accepted May 2, 2018

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