Pancreatic hamartoma: a rare cause of obstructive jaundice

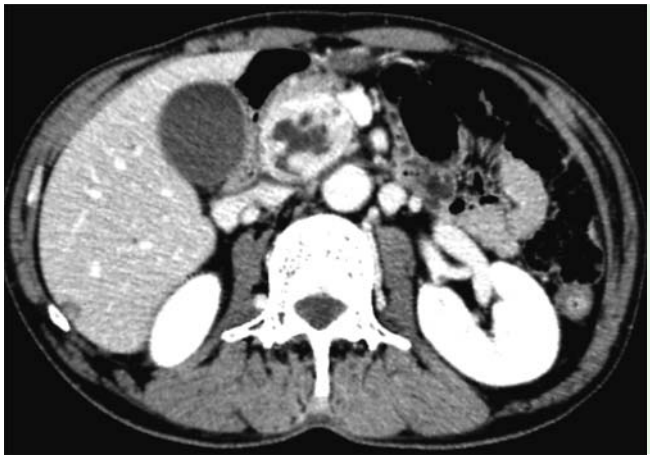

Fig. 1 Computed tomography showed a well-demarcated mass in the head of the pancreas with a heterogeneous enhancing pattern.

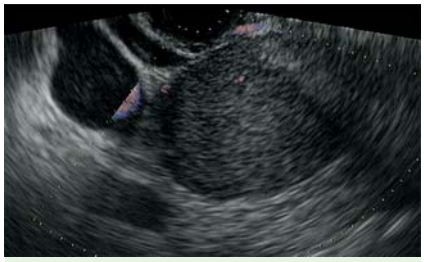

Fig. 3 Endoscopic ultrasound showed a well-demarcated hypoechoic mass in the head of the pancreas.

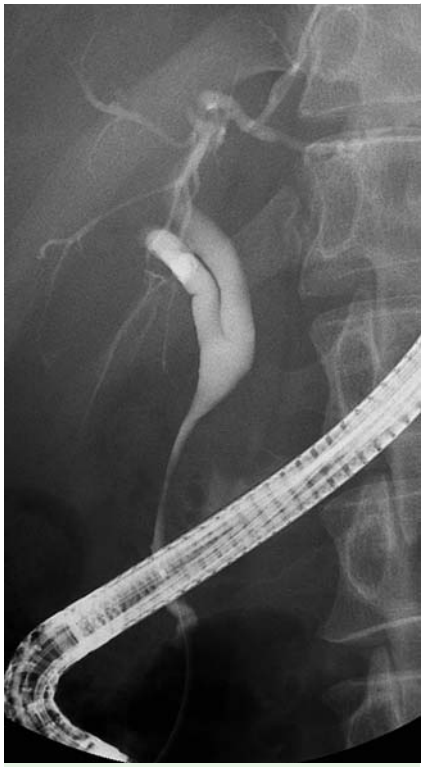

Fig. 2 Endoscopic retrograde cholangiopancreatography showed a smooth stricture of the distal common bile duct.

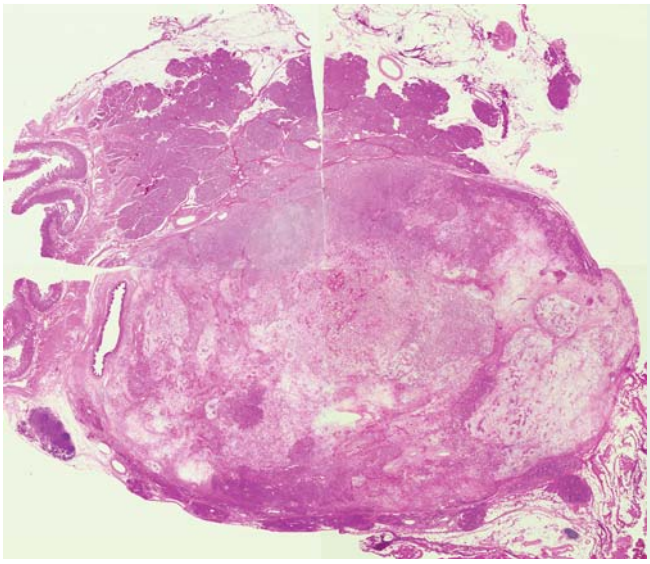

Fig. 4 The specimen showed a well-demarcated solid mass.

A 65-year-old man was referred to our hospital with obstructive jaundice. Laboratory tests showed elevated levels of alkaline phosphatase (1932 U/L; normal range 35 – 104 U/L), γ-glutamyltransferase (1030 U/L; normal value < 39 U/L), and bilirubin (3.6 mg/dL; normal value < 1.2 mg/dL). The tumor antigen CA 19-9 was also elevated (226.4 U/L; normal value < 37 U/L).

Abdominal computed tomography showed a well-demarcated mass in the head of the pancreas (▶ **Fig. 1**). This was 4 cm in diameter with a heterogeneous enhancing pattern. Endoscopic retrograde cholangiopancreatography showed a smooth stricture of the distal common bile duct (▶ **Fig. 2**), and a plastic biliary stent (8.5 Fr, 7 cm) was inserted into the bile duct. Although endoscopic ultrasound-guided fine-needle aspiration (EUS-FNA) was carried out (▶ **Fig. 3**), definitive diagnoses could not be made because the samples from EUS-FNA contained only normal-looking pancreatic tissue. Pancreaticoduodenectomy was performed. Microscopically, the specimen showed a well-demarcated solid mass (▶ **Fig. 4**), and the tumor was composed of non-neoplastic acinar and ductal cells embedded in a hypocellular fibrous stroma (▶ **Fig. 5**). Immunohistochemically, the spindle-shaped stromal cells were positive for CD34 and negative for c-kit. The ductal components were positive for S-100. The histological diagnosis was pancreatic hamartoma. There was no evidence of recurrence up to 3 years after surgery.

Pancreatic hamartoma is a non-neoplastic, mass-forming lesion of the pancreas and is extremely rare. The pathogenesis of these tumors remains unknown. The major histopathological features of pancreatic hamartoma are mature acini and small to medium-sized ducts showing a distorted architecture with various amounts of fibrous stroma. Immunohistochemically, the ductal components are positive for S-100 and the spindle-shaped stromal cells express CD34 and/or c-kit [1, 2].

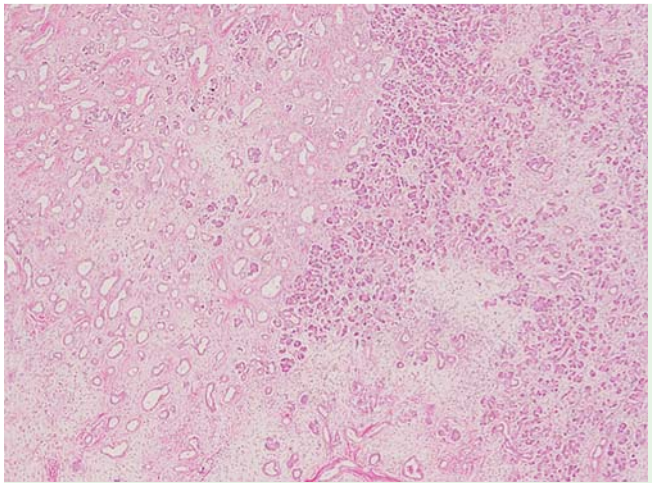

Fig. 5 The tumor was composed of non-neoplastic acinar and ductal cells embedded in a hypocellular fibrous stroma.

Weight loss and abdominal pain are the most common symptoms characterizing pancreatic hamartoma. To the best of our knowledge, our report describes the first case of pancreatic hamartoma manifesting initially as obstructive jaundice.

Endoscopy_UCTN_Code_CCL_1AF_2AZ_3AB

Competing interests: None

Hiroyuki Inoue[1], Masahiko Tameda[1], Reiko Yamada[1], Shunske Tano[2], Masaki Kasturahara[2], Yasuhiko Hamada[2], Kyosuke Tanaka[2], Noriyuki Horiki[2], Yoshiyuki Takei[1]

[1] Department of Gastroenterology and Hepatology, Mie University Graduate School of Medicine, Mie, Japan

[2] Department of Endoscopy, Mie University Graduate School of Medicine, Mie, Japan

References

1 *Pauser U, Kosmahl M, Kruslin B* et al. Pancreatic solid and cystic hamartoma in adults: characterization of a new tumorous lesion. Am J Surg Pathol 2005; 29: 797 – 800

2 *Yamaguchi H, Aishima S, Oda Y* et al. Distinctive histopathologic findings of pancreatic hamartomas suggesting their "hamartomatous" nature: a study of 9 cases. Am J Surg Pathol 2013; 37: 1006 – 1013

Bibliography

DOI http://dx.doi.org/10.1055/s-0034-1364953
Endoscopy 2014; 46: E157–E158

Stuttgart · New York
ISSN 0013-726X

Corresponding author

Hiroyuki Inoue, MD, PhD
Department of Gastroenterology and Hepatology
Mie University Graduate School of Medicine
2-174 Edobashi Tsu
Mie
Japan
Fax: +81-059-2325223
hiro1024@clin.medic.mie-u.ac.jp