# Pancreatic hamartoma: a rare cause of obstructive jaundice

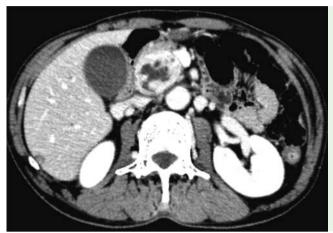


Fig. 1 Computed tomography showed a well-demarcated mass in the head of the pancreas with a heterogeneous enhancing pattern.

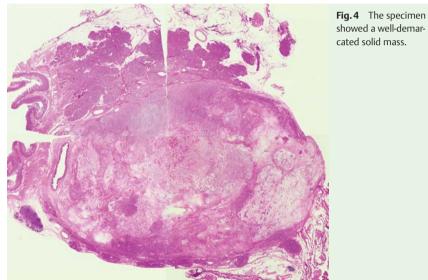


**Fig.3** Endoscopic ultrasound showed a welldemarcated hypoechoic mass in the head of the pancreas.

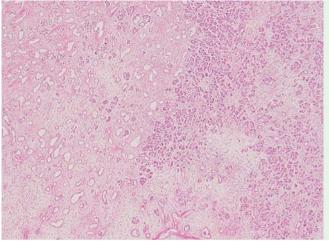


**Fig.2** Endoscopic retrograde cholangiopancreatography showed a smooth stricture of the distal common bile duct.

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),  $\gamma$ -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 4cm 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].



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.

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### Competing interests: None

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

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## References

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### **Bibliography**

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