Splenic artery aneurysm masquerading as a pancreatic tumor – diagnosis by contrast-enhanced endoscopic ultrasound

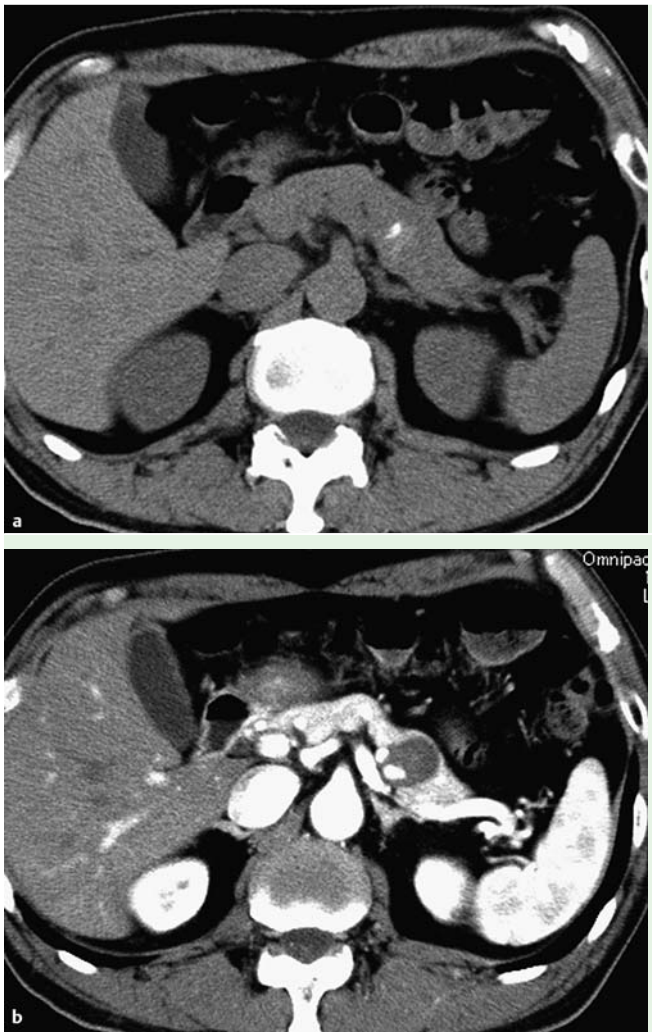

Fig. 1 Images from a computed tomography (CT) scan in a 64-year-old man with epigastric pain showing a calcified tumor in the pancreatic body: **a** without contrast; **b** with contrast, which demonstrated mild enhancement of the tumor.

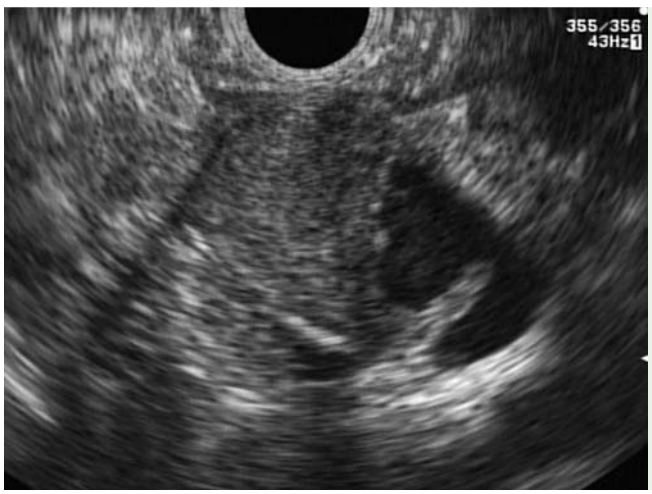

Fig. 2 Endoscopic ultrasound (EUS) image showing a tumor in the pancreatic body with a lateral shadow and a hyperechoic area suggestive of bleeding.

Splenic artery aneurysm is a relatively rare condition [1]; techniques such as computed tomography (CT) scanning and angiography are useful for its diagnosis [2]. However, diagnosis is challenging in the case of thrombosed aneurysms [3]. Contrast-enhanced endoscopic ultrasound (EUS) has been reported to be useful in the diagnosis of pancreatic tumors because it enables assessment of tumor blood flow [4]. We herein report a case of a splenic artery aneurysm that was masquerading as a pancreatic tumor and was diagnosed by contrast-enhanced EUS.

The patient was a 64-year-old man who visited our hospital with a presenting complaint of epigastric pain that had persisted for a few weeks. The patient was admitted for further investigations after a pancreatic tumor was suspected on abdominal ultrasound. A CT scan showed a mildly enhancing, 25-mm calcified tumor in the pancreatic body (**Fig. 1**). No accumulation was observed at this site on fluorodeoxyglucose positron emission tomography (FDG-PET).

EUS showed a tumor in the pancreatic body with a lateral shadow and a hyperechoic area suggestive of bleeding (**Fig. 2**). Because a pancreatic tumor such as a solid pseudopapillary tumor was suspected on the basis of these findings, an endoscopic ultrasound-guided fine needle aspiration (EUS-FNA) was scheduled. Contrast-enhanced EUS using Sonazoid was performed first and showed no evidence of enhancement (**Fig. 3**). The lesion was therefore thought to be non-neoplastic and was diagnosed as a splenic artery aneurysm. An embolization was performed during abdominal angiography (**Fig. 4**), after which the patient had an uneventful course and was discharged.

While EUS-FNA is an established and useful diagnostic method of tissue collection that is widely used [5], this report demonstrates that it is important from the perspective of preventing serious complications to consider the possibility of conditions such as splenic artery aneurysm in the differential diagnosis prior to undertaking EUS-FNA.

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Competing interests: None

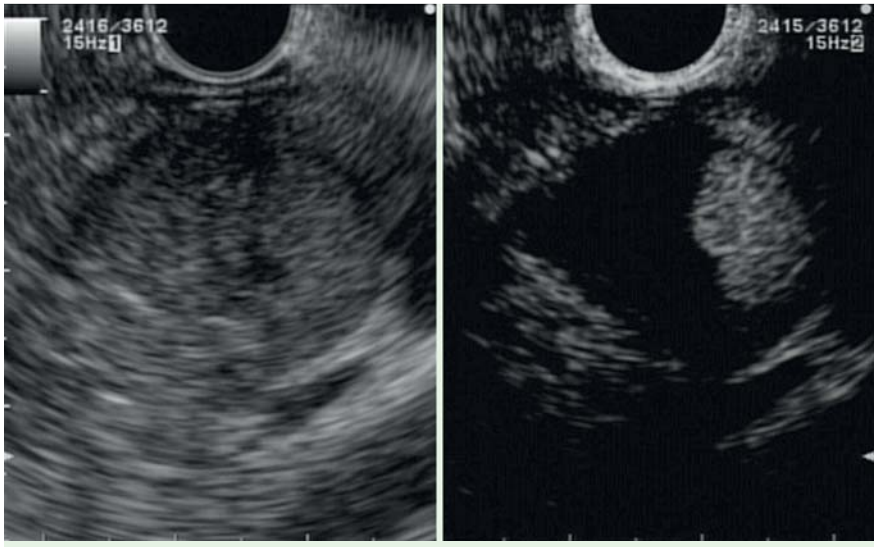

Fig. 3 A contrast-enhanced endoscopic ultrasound (EUS) using Sonazoid showed no enhancement, so the lesion was thought to be non-neoplastic and was diagnosed instead as a splenic artery aneurysm.

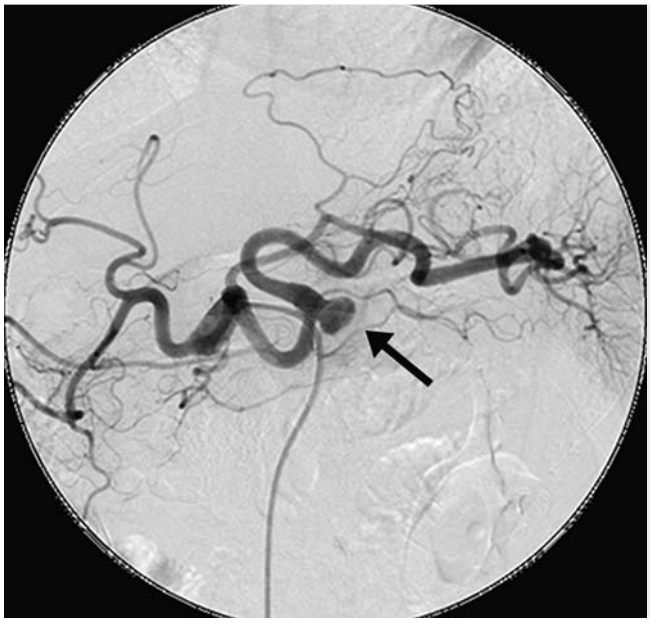

Fig. 4 Image taken during abdominal angiography showing the splenic artery aneurysm (arrow) that had appeared on computed tomography (CT) scanning and endoscopic ultrasound (EUS) to be a probable tumor of the pancreatic body.

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Bibliography

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