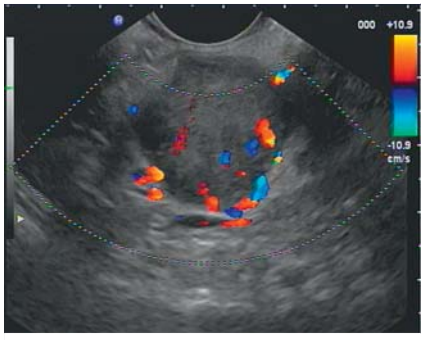
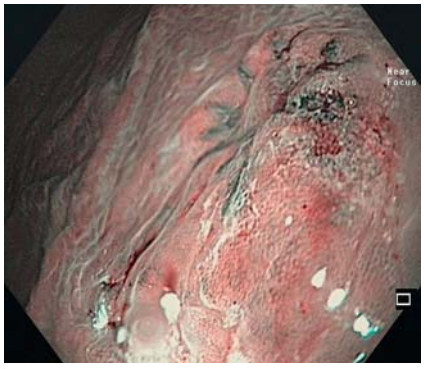
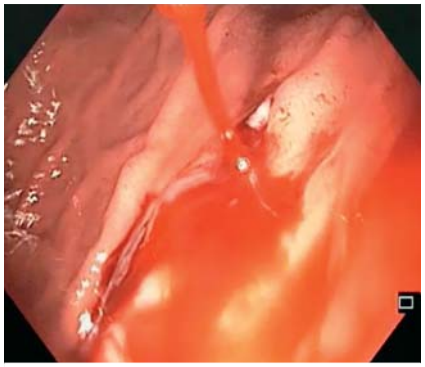
Brisk bleeding after gastric lesion biopsy – possible needle tract seeding after endoscopic ultrasound-guided fine-needle biopsy of a pancreatic metastasis from renal cell carcinoma



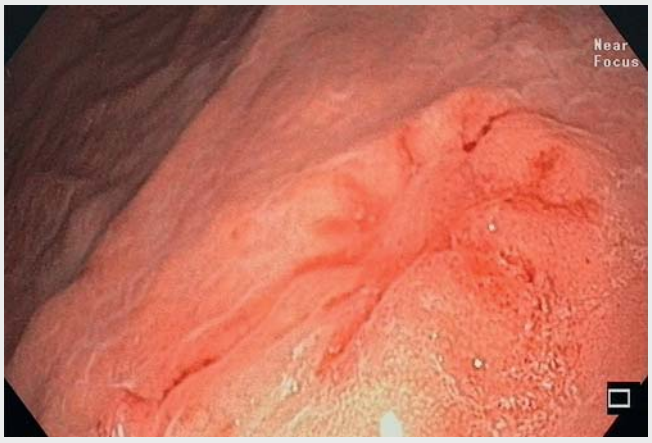
▶ **Fig. 1** Color-coded duplex endoscopic ultrasound (EUS) prior to EUS-guided fine-needle biopsy showed a hypoechoic mass with increased vascularity in the pancreatic body.



▶ **Fig. 2** Narrow-band imaging of the mucosal lesion on the posterior gastric wall presented an aberrant vascular pattern.



▶ **Fig. 3** Gastroscopic image of the arterial bleeding after forceps biopsy.



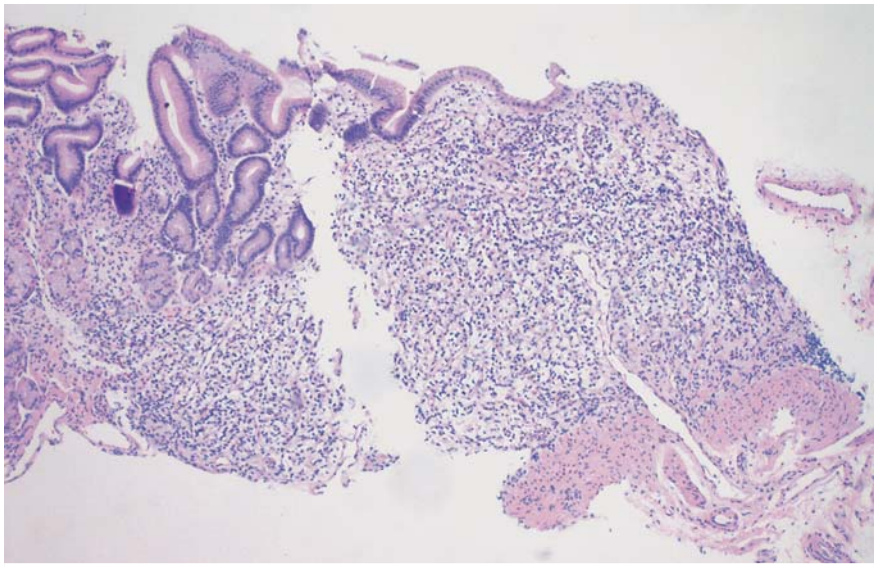
▶ **Video 1** Endoscopic ultrasound (EUS)-guided biopsy and bleeding management in a case of possible needle track seeding after EUS-guided fine-needle biopsy of pancreatic metastasis from renal cell carcinoma.

A 62-year-old patient had undergone left-sided partial nephrectomy due to renal cell carcinoma. The postoperative tumor classification was pT1a, pNx, L0, V0, G2, R0.

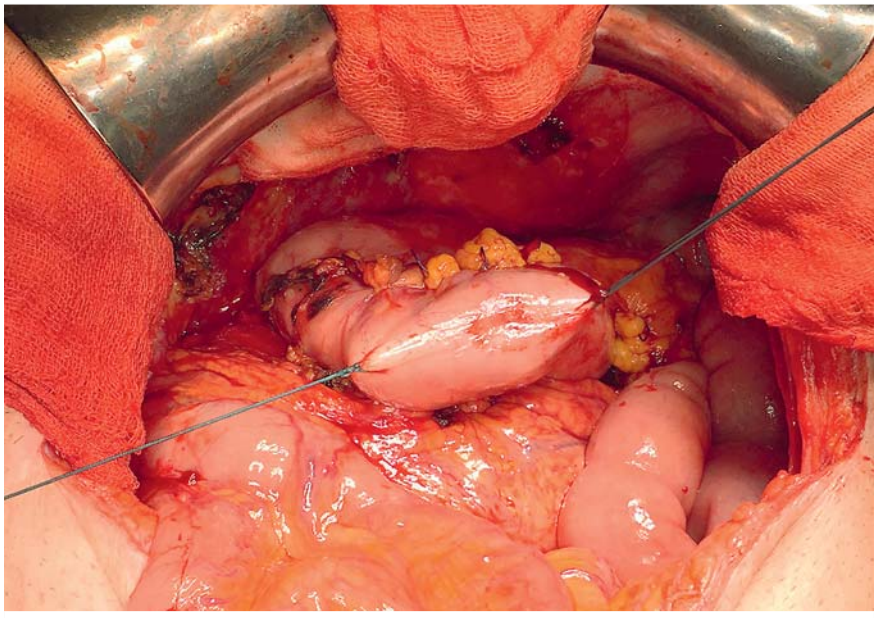
The patient presented 6 years later with abdominal pain and unintended weight loss. Computed tomography (CT) imaging indicated multiple pancreatic lesions, therefore an endoscopic ultrasound (EUS)-guided transgastric fine-needle biopsy was performed using the Procore 19G needle (Cook Medical, Limerick, Ireland) (▶ **Fig. 1**). Recurrence of the renal cell carcinoma was diagnosed. The tumor board decided for a pancreatectomy with splenectomy as there were no further metastases.

The patient was readmitted 6 months later because of neck swelling. The CT scan revealed a nodular goiter and a pneumomediastinum of unknown origin. Subsequent bronchoscopy and gastroscopy excluded perforation as the cause of the pneumomediastinum, which remained unclear. However, a mucosal lesion presenting an aberrant vascular pattern was detected on the posterior wall of the gastric body (▶ **Fig. 2**). Forceps biopsy led to arterial bleeding (▶ **Fig. 3**). An over-the-scope-clip (OTSC; Ovesco, Tübingen, Germany) was applied to control the bleeding (▶ **Video 1**). Histological examination showed a renal cell carcinoma underneath the gastric mucosa (▶ **Fig. 4**). Since the location of the gastric lesion corresponded to the fine-needle biopsy site, it was most likely the procedure had caused needle tract seeding to the gastric wall. Because fine-needle biopsy of the nodular goiter also revealed metastases of the renal cell carcinoma, a thyroidectomy and gastric wedge-resection were performed (▶ **Fig. 5**).

Pancreatic metastases are rare, with a reported incidence varying from 1.6 % to 11 % [1]. The most common metastasis to the pancreas is renal cell carcinoma [2]. EUS-guided fine-needle biopsy is considered a safe technique with few adverse events. However, needle track seeding,



▶ **Fig. 4** Histological examination of the gastric biopsy revealed a clear cell renal cell carcinoma growing underneath the gastric mucosa.



▶ **Fig. 5** Intraoperative image during the gastric wedge resection showed the renal cell carcinoma metastasis caused by needle tract seeding.

although uncommon, is a serious adverse event that may impair patient's outcome [3]. Considering the associated risk, EUS-guided fine-needle biopsy should be carried out only when the results obtained are useful for therapeutic decision-making [4], and the needle tract line should be placed within the surgical resection margins.

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Competing interests

The authors declare that they have no conflict of interest.

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Bibliography

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