Pancreatic melanoma metastasis diagnosed by endoscopic ultrasound-guided SharkCore biopsy



Fig. 1 T1-weighted contrast-enhanced magnetic resonance imaging (MRI) scan showing a 20 × 17-mm mass in the pancreatic tail, which appears to be both isointense and hyperintense (circled).

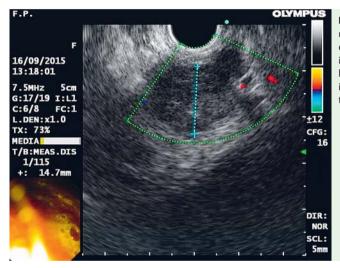
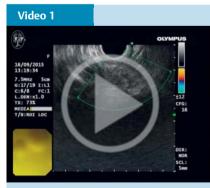


Fig. 2 Endoscopic ultrasound (EUS) image of the pancreas showing a 20-mm round, hypoechoic mass with irregular borders in the tail of the pancreas.



Endoscopic ultrasound (EUS) imaging of the mass in the pancreatic tail and transduodenal fine needle biopsies obtained with the Shark-Core biopsy needle.

Metastatic cancers make up fewer than 2% of pancreatic malignancies, and the majority of them mimic a primary adenocarcinoma [1]. Limited data are available concerning the assessment of pancreatic secondary cancers using endoscopic ultrasound-guided fine needle biopsy (EUS-FNB) [2]. In this study we report the first case of metastatic pancreatic melanoma to be diagnosed by combining EUS with biopsy sampling using the SharkCore needle (SharkCore Fine Needle Biopsy System, Covidien IIc, Newton Massachusetts, USA). A 57-year-old woman presented with evidence of a pancreatic mass. Her past medical history included a choroidal melanoma in 2009, which had been treated by iodine-125 brachytherapy. At the time of treatment no metastatic lesions had been documented.

In May 2015, a magnetic resonance imaging (MRI) scan performed for clinical surveillance demonstrated a nodular liver consistent with metastasis. The patient underwent transarterial chemoembolization with irinotecan. A subsequent MRI scan showed a nodular lesion of the pancreatic tail (20×17 mm), which was a mixture of isointense and hyperintense on T1-weighted images (> Fig. 1), and was hypointense on T2-weighted images, compatible with either primary cancer or metastatic disease. The patient was asymptomatic, with no suspicious skin lesions and no palpable lymphadenopathy. Laboratory test results were within normal limits.

The patient was referred to our institution for EUS evaluation. The EUS (Olympus UCT 140 linear array echoendoscope) showed a 2-cm hypoechoic mass in the pancreatic tail (**o** Fig. 2). Five transduodenal FNB passes (22-gauge SharkCore needle) into the mass resulted in multiple tissue samples (maximum diameter 0.08 – 0.1 cm) (**o** Video 1). Histological examination showed malignant pigmented epithelioid lesions, which were immunohistochemically confirmed as metastatic melanoma (**o** Fig. 3). The patient underwent chemotherapy and has currently completed her induction cycles with fotemustine.

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Competing interests: None

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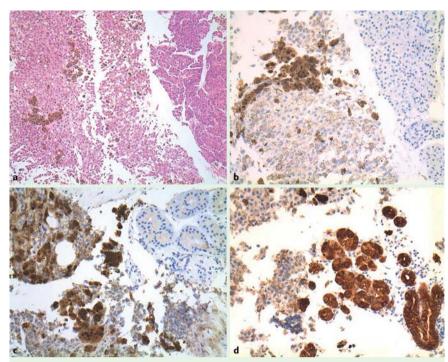


Fig. 3 Histopathology of the pancreatic tissue samples. **a** Hematoxylin and eosin (H&E) staining shows normal pancreatic cells coexisting with a neoplastic (pigmented) cell population (original magnification × 10). **b** – **d** Immunohistochemical staining shows positivity with: **b** MNF 116 for epithelial cytokeratin (original magnification × 20); **c** S100, a melanocytic marker (original magnification × 20); **d** HMB-45, a melanocytic marker (original magnification × 20).

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Bibliography

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