Pancreatic melanoma metastasis diagnosed by endoscopic ultrasound-guided SharkCore biopsy

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 lesion 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 (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) (Video 1). Histological examination showed malignant pigmented epithelioid lesions, which were immunohistochemically confirmed as metastatic melanoma (Fig. 3). The patient underwent chemotherapy and has currently completed her induction cycles with fotemustine.

Competing interests: None

Elena Nadal1, Patrizia Burra2, Claudia Mescoli3, Laura Albertoni3, Cosimo Sperti4, Giacomo Carlo Sturniolo1, Alberto Fantin1

1 Gastroenterology Unit, Department of Surgery, Oncology and Gastroenterology, University Hospital of Padua, Padua, Italy
2 Multivisceral Transplant Unit, Department of Surgery, Oncology and Gastroenterology, University Hospital of Padua, Padua, Italy
3 Surgical Pathology & Cytopathology Unit, Department of Medicine (DIMED), University Hospital of Padua, Padua, Italy
4 3rd Surgical Clinic, Department of Surgery, Oncology and Gastroenterology, University Hospital of Padua, Padua, Italy
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).

References
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Bibliography  
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Corresponding author  
Elena Nadal, MD  
Gastroenterology Unit  
Department of Surgery, Oncology and Gastroenterology  
University Hospital of Padua  
Via Nicolò Giustiniani, 2  
35128 Padua  
Italy  
Fax: +39-049-8212887  
elena.nadal@hotmail.it