

CASE REPORT

Isolated Metastatic Melanoma to the Pancreas Diagnosed by Endoscopic Ultrasonography: A Case Report

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ABSTRACT

Context It is uncommon to find cancer metastasizes to the pancreas; in fact less than 2% of pancreatic lesions represent metastatic disease. If metastatic disease to the pancreas is found, it is usually renal cell carcinoma, breast cancer, lung cancer or colon cancer. It is unusual for melanoma to metastasize to the pancreas, but if it does it is usually in the setting of widespread disease. Malignant melanomas very rarely develop isolated pancreatic metastasis. In fact, there have only been a few reported cases in the last 30 years of isolated metastatic melanoma to the pancreas. **Case report** We report a unique presentation of an extremely rare diagnosis of isolated metastatic melanoma to the tail of the pancreas with unknown primary lesion. This patient presented with abdominal pain 8 years after having a curative Mohs procedure done for cheek melanoma. Abdominal imaging revealed a pancreatic tail mass. EUS-guided FNA of the pancreatic mass revealed a diagnosis of metastatic melanoma based on cytology and clinical history. **Conclusions** Accurate diagnosis of a pancreatic lesion or mass is critical because prognosis, survival, and management are all affected. In order to diagnose pancreatic lesions, effective sampling and immunocytochemistry is required. In this particular case, EUS-guided fine needle aspiration of the pancreatic mass allowed for an immediate diagnosis of metastatic melanoma based on cytology and clinical history. This highlights the importance and utility of EUS-guided fine needle aspiration in distinguishing between a pancreatic metastatic lesion versus primary pancreatic cancer.

INTRODUCTION

It is uncommon to find cancer metastasize to the pancreas; in fact less than 2% of pancreatic lesions represent metastatic disease. If metastatic disease to the pancreas is found, it is usually renal cell carcinoma, breast cancer, lung cancer or colon cancer [1]. It is unusual for melanoma to metastasize to the pancreas, but if it does it is usually in the setting of widespread disease. Malignant melanomas very rarely develop isolated pancreatic metastasis. In fact, there have only been a few reported cases in the last 30 years of isolated metastatic melanoma to the pancreas [2]. Despite metastatic melanoma being a grim diagnosis, isolated metastasis to intra-abdominal organs fortunately has surgical resection as a potentially curative option [3, 4].

CASE REPORT

A fifty-eight-year-old female presented to her primary care doctor with vague epigastric abdominal pain that was dull in nature, radiated to her back, and worsened

with food. Only pertinent past medical history was cheek melanoma, which was 0.34 mm deep and scaled as Clark III in 2008. Additional workup at that time did not reveal any evidence of nodal involvement or metastatic disease. The cheek melanoma was completely excised using a Mohs surgical technique in 2008 and considered cured. Complete metabolic panel, complete blood counts, and liver tests were all normal. CT scan of the abdomen and pelvis was done next. Imaging showed a 3.5×3×3.5 cm thick-walled exophytic cystic mass arising from the tail of the pancreas. The mass was concerning for mucinous cystic pancreatic neoplasm, mucinous cystadenocarcinoma, or neuroendocrine tumor. Chromogranin and metanephrine levels were checked as well and were normal. She was referred to gastroenterology for endoscopic ultrasonography with fine needle aspiration (FNA) of the pancreatic lesion. Endoscopic ultrasound examination showed a hypoechoic 2.9×2.7 cm lesion at the tail of the pancreas adjacent to the spleen (**Figure 1a, 1b, 1c**). There were both solid and fluid components to the lesion. Then, transgastric fine needle aspiration of the pancreatic tail mass was done using a 22-gauge cook FNA needle (**Figure 1d**). Cytology showed necrotic cells, abnormal nucleoli, and was positive for malignant cells (**Figure 2a, 2b**). Immunohistochemistry of the cell block was Sox 10 positive and MART-1 positive (**Figure 2c**). Histomorphology, immunochemistry, and clinical history were consistent with metastatic melanoma. PET scan was done next to look for additional metastatic lesions and the primary lesion. Only the pancreatic tail lesion came back positive on the PET. The original cheek melanoma excised

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Keywords Melanoma; Pancreas

Abbreviations EUS-FNA Endoscopic Ultrasound-Guided Fine Needle Aspiration

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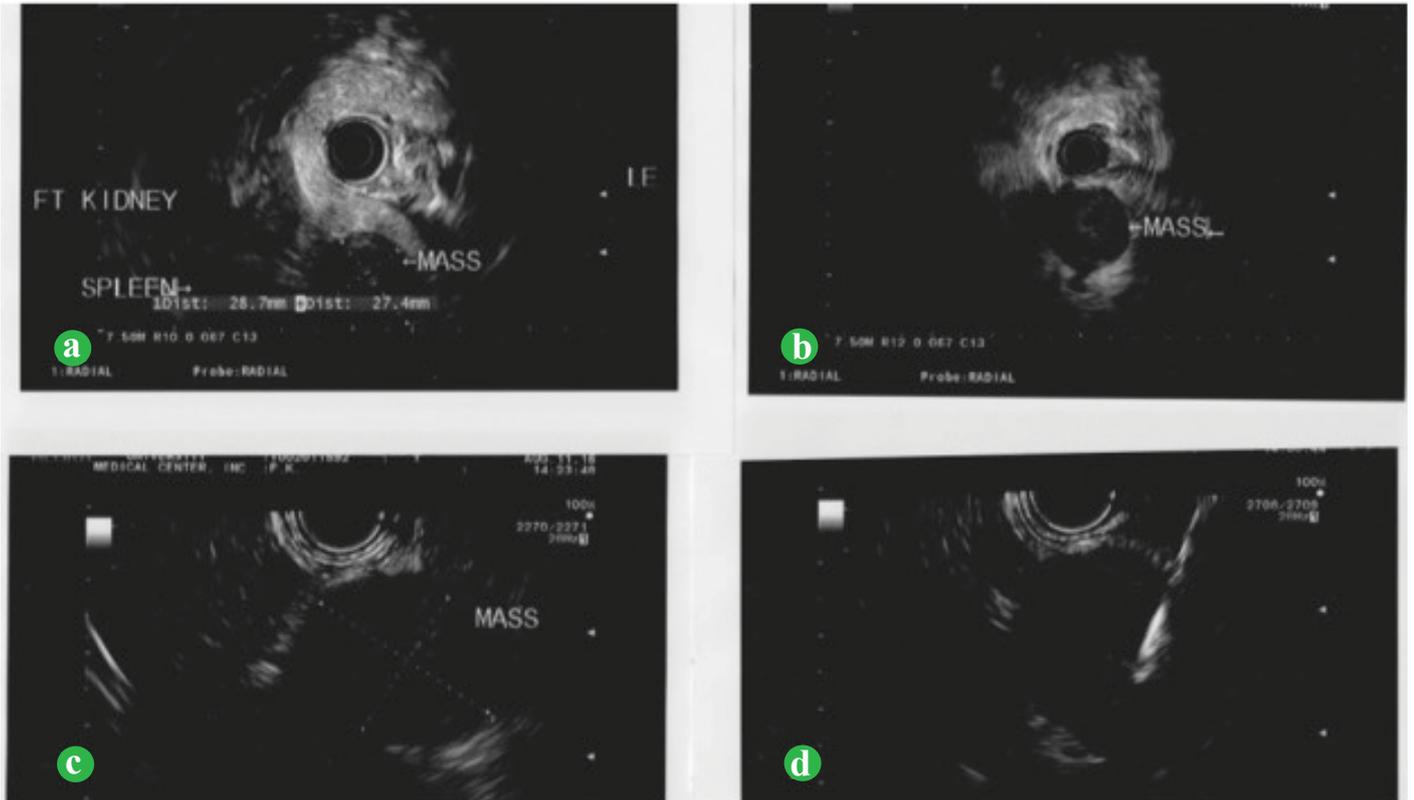


Figure 1. (a, b, c). Radial echoendoscope showing a hypochoic, well-defined, pancreatic mass adjacent to the spleen. (d). EUS-guided fine-needle aspiration with a 22 gauge needle of a pancreatic tail mass.

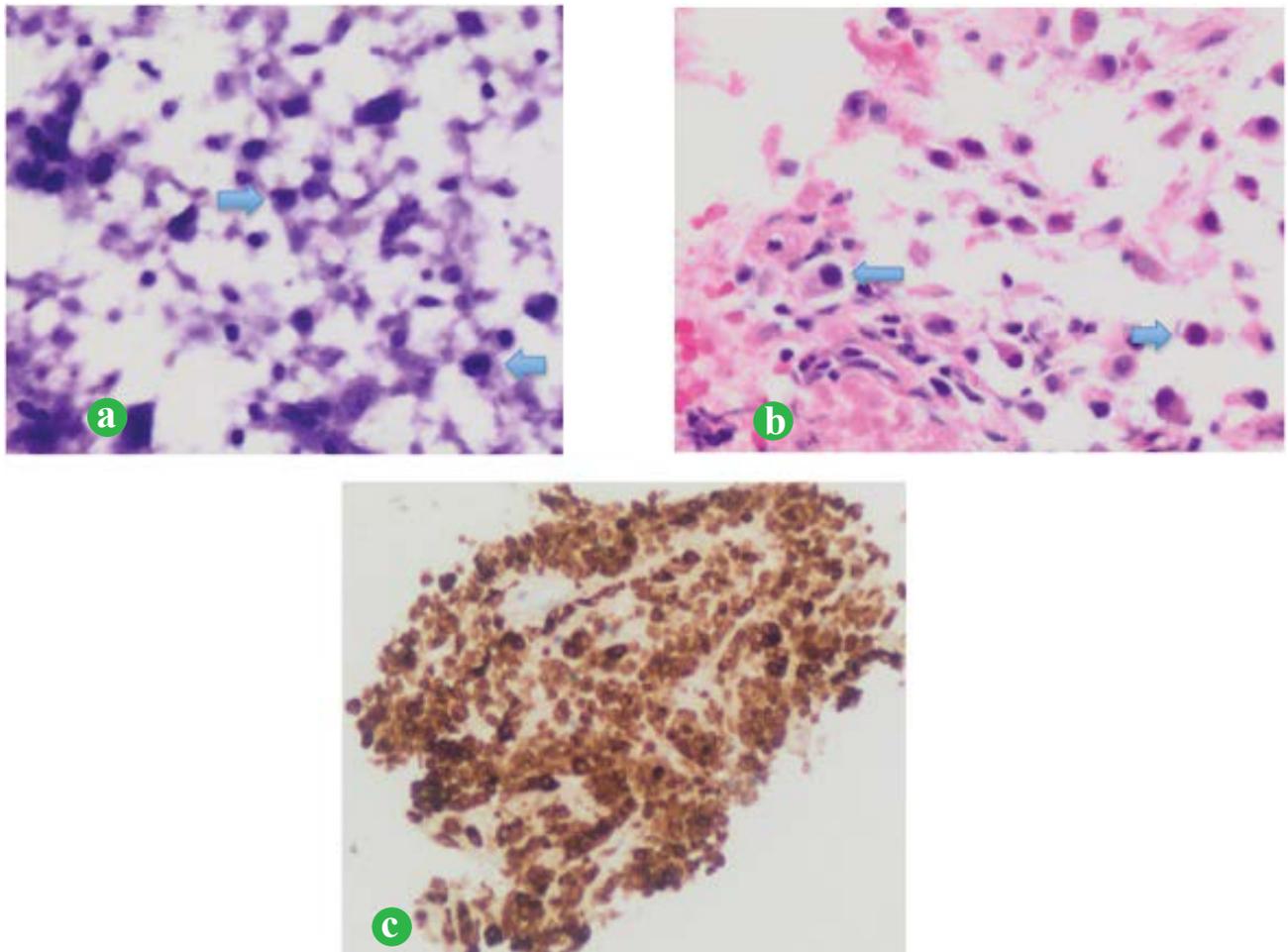


Figure 2. (a). Cytology retrieved from FNA of pancreatic tail mass displays nuclear atypia and anisonucleosis [arrows]. (b). Cell block prepared from FNA shows hyperchromatic, giant, and prominent nucleoli, high nuclear:cytoplasm ratio [arrows]. (c). Immunohistochemistry staining diffusely positive in the cytoplasm for Melanocytic Antigen Recognized by cytotoxic T-lymphocytes (MART1).

in 2008 was thought to be an unlikely primary tumor. A repeat thorough physical examination did not reveal a primary tumor. Therefore, she was diagnosed with isolated malignant melanoma with metastasis to the pancreas with unknown primary tumor.

She underwent laparoscopic distal pancreatectomy with splenectomy for treatment of the isolated metastatic melanoma to the pancreas. Surgical pathology specimen was consistent with melanoma. Her postoperative course was complicated by small bowel obstruction requiring exploratory laparotomy. Now, she is about 5 weeks post-surgery and her main symptom is nausea. This is being managed symptomatically, and she is being considered for immunotherapy in the coming weeks.

DISCUSSION

We report a unique presentation of an extremely rare case of isolated metastatic melanoma to the tail of the pancreas. This patient presented with abdominal pain 8 years after having a curative Mohs procedure done for cheek melanoma. Abdominal imaging revealed a pancreatic tail mass. Accurate diagnosis of a pancreatic lesion or mass is critical because prognosis, survival, and management are all affected. In order to diagnose pancreatic lesions, effective sampling and immunocytochemistry is required. In this particular case, EUS-guided FNA of the pancreatic mass allowed for an immediate diagnosis of metastatic

melanoma based on cytology and clinical history. This highlights the importance and utility of EUS-guided FNA in distinguishing between a pancreatic metastatic lesion versus primary pancreatic cancer [5].

Conflict of Interest

The authors declare that there is no conflict of interests regarding the publication of this paper.

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