


# Malign melanotic schwannoma of pancreatic metastasis

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## To the Editor,

We read with great interest the editorial published recently by Heatley et al.<sup>1</sup> that summarized the *Epithelioid malignant peripheral nerve sheath tumor arising in schwannoma*. The authors eloquently combine their experience with the new changes in the light of latest literature and discussed the common radiologic and pathologic characteristics of malignant peripheral nerve sheath tumors. In this context, we would like to present a recent case study of our experience in which we successfully diagnosed pancreatic metastatic melanotic schwannoma (MS) by using Endoscopic Ultrasonography (EUS).

A 82-year-old female patient with MS was admitted to our clinic with a month history of jaundice associated with itching. Six months ago, diagnostic excision of the localized lateral neck mass showed MS. Imaging and blood tests were performed to diagnose the cause of the jaundice. Computed tomography (CT) of the abdomen revealed a nodular lesion over the head of pancreas. Subsequently, a curvilinear echoendoscope (EG-58QUT, FUJINON) was used to evaluate and to perform fine needle aspiration (FNA) of suspicious lesion. EUS detected a hypoechoic mass (measuring approximately 33 mm by 22 mm by) in the head of the pancreas with cystic component and irregular borders (Figure 1(a)). FNA was performed via standard technique using a 22-gauge needle. The obtained sample was then sent to the cytopathology department of our hospital. The immunohistochemical stains were found to be diffuse positive for S100 protein, focal positive MelanA, and showed weakly reactivity to monoclonal antibody HMB45. There was no immunostaining in the tumoral cells for CD45, pancreatin and chromogranin A. Ki-67 index (the percentage of cells positive for Ki-67) was 70%. Microscopic examination revealed a heavily brown pigmented neoplasm,

characterized by markedly pleomorphic cells, with epithelioid histologic features (Figure 1(b)).

Melanotic schwannomas are rare tumors and they are unusual variants of nerve sheath neoplasms accounting for less than 1% of primary nerve sheath tumors.<sup>2</sup> MS occurs usually in a paraspinal region, but can also be seen in the oral cavity, gastrointestinal tract, skin, shoulder, axilla and soft tissue. It contains melanosomes and characterized by spindle and epithelioid cells which contain heavily pigmented granules. Moreover, it is composed of cells having the immunophenotype and ultrastructure of Schwann cells.<sup>3</sup> Although most MS are benign, approximately 10% are malignant and tends to metastasize.<sup>4</sup> Grdtz et al.<sup>5</sup> described at their paper that mass of right retromolar area of the mandible with the diagnosis of malignant MS spreaded to pancreas and liver after 3 years from the date of initial diagnosis. However, there was no histopathologic evidence about it. It has been considering that MSs are not able to metastasize to the pancreas, we confirmed that it could be possible and this would be important for clinician to predict the clinical or biologic behavior of the tumor. We believe that our case is the first example in the literature demonstrating metastasis of MS to the pancreas and showing the usefulness of EUS in the diagnosis.

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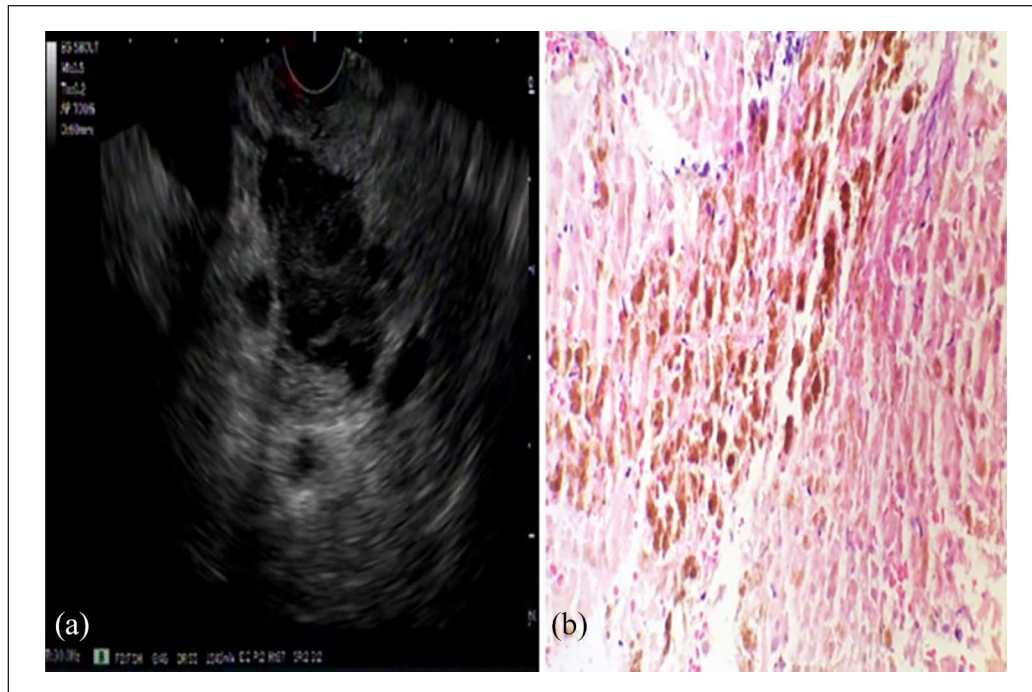
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**Figure 1.** (a) Pancreatic hypoechoic mass with lobulated borders and cystic changes and (b) microscopic examination revealed a heavily brown pigmented neoplasm with necrosis, characterized by markedly pleomorphic cells, with epithelioid histologic features (HEX400).

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### Author contributions

Serkan Dogan: Concept, manuscript preparation, Deniz Erdogan: Data acquisition, Enes Firat: Data acquisition, Ebru Akay: Data acquisition

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### Ethical approval

We don't need ethical approval for this article. This not drug or animal study that can be harmful them.

### Informed consent

Written informed consent was obtained from the patient(s) for their anonymized information to be published in this article.

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