

Isolated bilateral metastatic mass of malignant melanoma as shown by F-18 Fluorodeoxyglucose Positron Emission Tomography/Computed Tomography

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Abstract

Melanoma of unknown primary is the diagnostic challenge as well as is associated with poor prognosis for the patient. We present a 79 years old male patient who was presented with hypermetabolic adrenal mass lesions. The biopsy results shown metastatic malignant melanoma.

Keywords: malignant melanoma, positron emission tomography, adrenal mass.

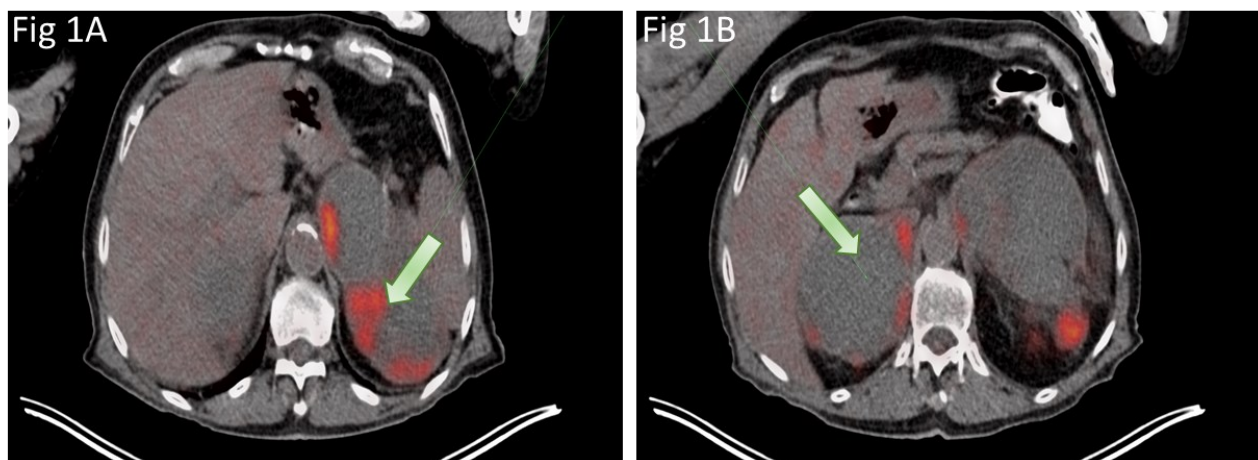


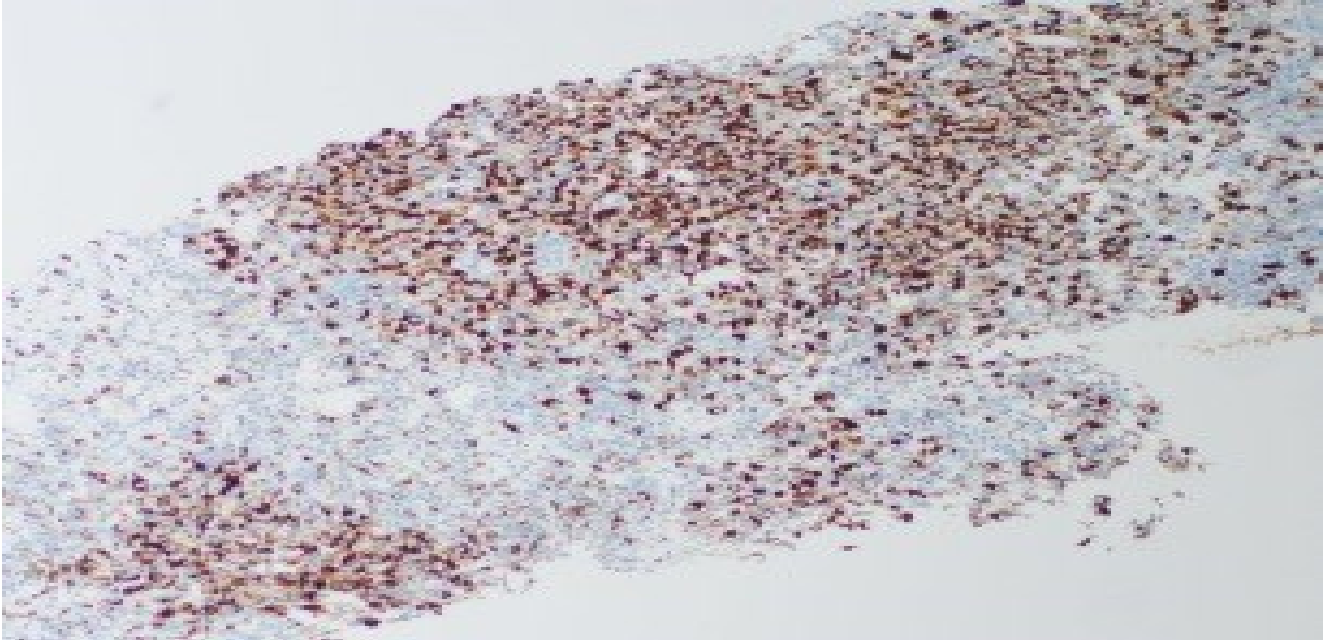
Figure 1: 79 years old male patient with diagnosis of suspicious adrenal gland mass lesions were referred for F-18 FDG PET/CT imaging. The imaging revealed bilateral multiple (maximum transaxial length of 108 mm right and 66 and 77 mm left) adrenal mass lesions with significantly increased FDG accumulation with SUVmax level of 23.5 (Figure 1A-left arrow, Figure 1B-right arrow). The pathology results revealed metastatic malignant melanoma. There was no additional pathologic uptake in FDG PET/CT imaging elsewhere in the body. There

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are three case reports previously reported in the literature (1-3). One of these cases present with incidental lesions with unknown primary as well (1). Another case was presented with significantly increased F-18



Fluorodopa accumulation at the same time (2). These patients present poor prognosis unless total surgical removal is possible (1). The F-18 FDG PET/CT has documented role in the diagnosis and restaging of malignant melanoma as the lesions are FDG avid and the images include whole body examination (4). F-18 FDOPA PET/CT is another useful imaging modality in metastatic melanoma (5). This case report shows significant FDG accumulation in the adrenal mass lesions with pathology result of malignant melanoma.

Figure 2: Immunohistochemistry pathologic images of the patient verifying malignant melanoma by positive staining.

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Concept: Z.P.K., P.P.O., O.O., M.Y., **Design:** Z.P.K., **Supervision:** Z.P.K., P.P.O., O.O., M.Y., **Data Collection and/or Processing:** Z.P.K., P.P.O., O.O., M.Y., **Analysis and/or Interpretation:** Z.P.K., **Literature Review:** Z.P.K., **Writer:** Z.P.K.

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