

Title:

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Imaging findings of melanoma metastasis in the gallbladder

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Abstract

Cutaneous melanoma is a common and aggressive neoplasm, and metastases to the

gastrointestinal tract mainly affect the small intestine, colon, and stomach. Gallbladder

metastasis is uncommon.

We present a case of melanoma metastasis in the gallbladder in a 40-year-old man with a

previous diagnosis of cutaneous melanoma in the dorsal region.

The purpose of this article is to reinforce the importance of imaging exams, adding PET scan as

another useful method in patients with melanoma in follow-up.

Full text

Case:

A 40-year-old male with previous diagnosis of cutaneous melanoma in the dorsal region, with

metastases in axillary and mesenteric lymph nodes, and in the central nervous system

presented focal area of increased radiopharmaceutical uptake in the topography of the

gallbladder infundibulum on a control PET/CT (Fig. 1a), which corresponded to a nodular lesion

in an abdominal ultrasound (Fig. 1b).

Abdominal MRI (Fig. 2) was performed to better assess the lesion, showing a vegetating nodular

lesion with lobulated contours, based on implantation in the gallbladder infundibulum. The



lesion showed internal hypersignal areas in T1, restricted diffusion, and heterogeneous contrast enhancement. The patient underwent laparoscopic cholecystectomy, and the anatomopathological study (Fig. 3) of the lesion was compatible with melanoma metastasis.

Discussion:

Cutaneous melanoma is a common and aggressive neoplasia. Metastasis to the gallbladder is highly uncommon. When present, patients are usually asymptomatic and with other sites of metastases associated (1). Radiological findings are fundamental to help in the diagnosis process and in staging (2). Ruiz-Pardo et al. reported a case of cutaneous melanoma with asymptomatic gallbladder metastasis diagnosed during the follow-up, demonstrating the usefulness of CT and ultrasound as radiological methods for the diagnosis of this rare pathology (3). Our case reinforces the importance of imaging exams, adding PET scan as another useful method in patients with melanoma in follow-up. Fluorodeoxyglucose PET scan can reveal areas of increased radiopharmaceutical uptake in unsuspected metastatic sites, such as the gallbladder (2).

References

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Figures

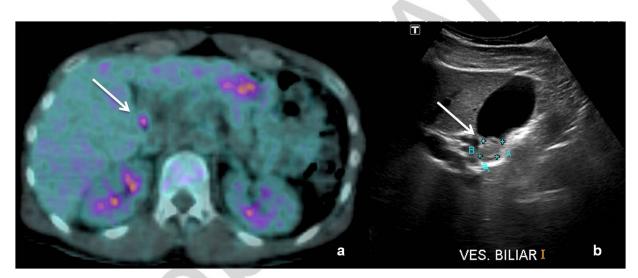


Fig 1. (a) PET/CT shows focal area of increased radiopharmaceutical uptake in the topography of the gallbladder infundibulum (white arrow in a) which corresponding to (b) a heterogeneous nodule in the ultrasound study (white arrow in b).



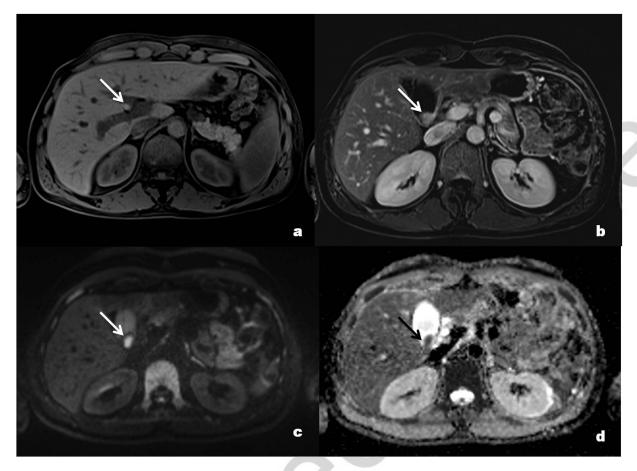


Fig 2. MRI shows vegetating nodular lesion with lobulated contours, based on implantation in the gallbladder infundibulum showing (a) internal hypersignal areas in T1, (b) heterogeneous contrast enhancement, (c) restricted diffusion on DWI with (d) a low ADC value.





Fig 3. Surgical specimen showing pigmentated nodule in gallbladder infundibulum. The anatomopathological study of the lesion was compatible with melanoma metastasis.