

Title:

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Diagnosis of metastatic melanoma in the liver. where can the primary tumor be found?

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Dear Editor,

The patient is a 57-year-old woman with a history of Hodgkin's lymphoma in remission. A routine analysis found hepatic profile alterations, and a full liver function test showed SOLs in a non-cirrhotic liver. An anatomopathological study revealed metastatic melanoma. The patient was referred to the Departments of Dermatology and Ophthalmology to locate the primary tumor and was diagnosed with stage IV choroidal melanoma.

Case report

The patient is a 57-year-old woman with a history of Hodgkin's lymphoma in remission who was referred to the Department of Digestive System after a routine analysis showed hepatic profile alterations.

A full liver function test and an assessment with directed questions were conducted and were negative for hepatotropic viruses and autoimmune disorders. An ultrasound revealed an enlarged liver with heterogeneous parenchyma and two hypoechoic

lesions of 13 mm and 18 mm with unspecific characteristics.

The study was completed with an abdominal CT scan that showed a lesion in segment 8 of approximately 2.5 cm with arterial hyperenhancement and portal washout. Hepatocarcinoma was suspected and the patient was referred to the Department of Hepatology, where an MRI was conducted considering the oncological history and the lack of findings that suggest cirrhosis. The MRI showed multiple liver SOLs that suggested lymphomatous infiltration, and multicentric HCC could not be ruled out.

A guided biopsy of the lesion located in segment II/III was conducted and the findings suggested infiltration of the liver parenchyma by melanoma (Fig.1).

The patient was referred to Dermatology to rule out suspicious skin, genital mucosa, anal, oral and scalp lesions.

She was then assessed by Ophthalmology, where she reported a decrease in visual acuity in her right eye after guided questioning. The fundus of the right eye showed a round mass on the nasal area coming from the ciliary body/peripheral retina with associated serous effusion that seemed to affect the macula, and the ultrasound showed a large intraocular mass that seemed to originate from the ciliary body (Fig.2).

A PET-CT showed signs of a hypermetabolic nodular lesion suggesting a primary tumor and multiple liver metastases and bone metastases on the left femur and iliac bone (stage IV).

The patient was referred to the Reference Unit of eye tumors, but she died prior to being assessed due to complications secondary to the tumor.

DISCUSSION

Although choroidal melanoma is a rare entity, it is the most common malignant primary intraocular tumor. Dissemination is hematogenous, and in 90% of the cases it causes liver metastasis. It has a poor prognosis and a high mortality rate, with an annual survival of metastasis patients of 15%.

The diagnosis of liver lesions, particularly with metastatic origin, requires a comprehensive management. Directed questions that take the oncological history of the patient into account are essential, as well as a multidisciplinary approach to reduce the morbidity and mortality associated with late diagnosis and to improve the quality of life of these patients.

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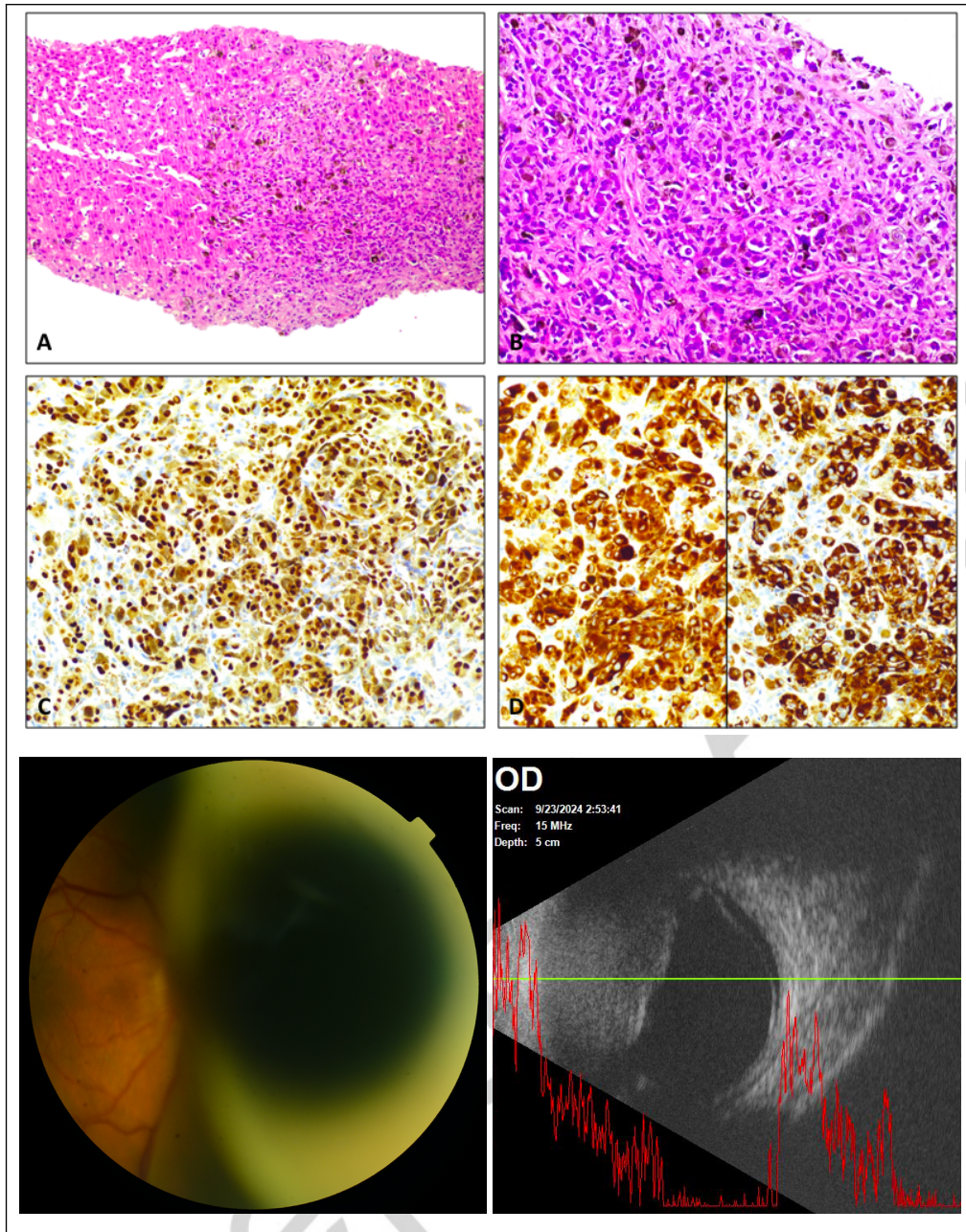


Fig.1: A: Infiltration in liver parenchyma by neoplastic proliferation of cells with abundant brownish pigmentation. B: Neoplasm composed by atypical cytoplasmic elements with pigmentation and marked nuclear pleomorphism, as well as a prominent nucleolus. C: SOX-10 immunohistochemical staining, positive at nuclear level. D: Melan-A and HMB45 immunohistochemical staining at cytoplasmic level. Fig.2: E: A+B eye ultrasound showing a mass that occupies the anterior part of the vitreous chamber and retinal detachment in the posterior section. F: Retinography with pharmacologic mydriasis focused on the posterior pole showing a retro-iridal mass on the nasal area with underlying pigmented contents.