



Metastasis of Spindle Cell Malignant Melanoma in Gallbladder

Javier Arredondo Montero¹ · Ana Cristina Recreo Baquedano² · Mónica Bronte Anaut³ · Nerea Martín-Calvo^{4,5}

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Abstract

Malignant melanoma is an aggressive neoplasm with a high tendency to metastasize.

Gastrointestinal metastases, although described in the literature, are infrequent. We present the case of a 51-year-old male patient with a surficial spreading melanoma stage IIIc with BRAF mutation who presented a gallbladder outgrowth lesion, compatible with a polyp. A significant growth of the lesion was observed in subsequent TC studies and a laparoscopic cholecystectomy was performed. The anatomopathological study of the specimen confirmed the diagnosis of gallbladder metastasis due to epithelioid and spindle cell malignant melanoma. The presence of a gallbladder lesion in the context of a patient diagnosed with melanoma should establish the diagnostic suspicion of metastasis, and an early extension study and laparoscopic cholecystectomy should be considered. The palliative surgical approach to avoid hepatobiliary symptomatology can be considered.

Keywords Spindle cell · Melanoma · Gallbladder

A 51-year-old male patient with a melanocytic lesion in the left lumbar region was biopsied, confirming the histopathological diagnosis of superficial spreading melanoma pT4bM2b M0 (stage IIIc) with BRAF mutation. Further surgery was indicated to widen the margins and a selective biopsy of the sentinel lymph node was performed, which showed metastasis without extracapsular invasion. Left inguinal lymphadenectomy was proposed. Two months earlier, the patient had presented an episode of acute diverticulitis, for which reason an abdominal computed axial tomography was requested. The CT scan showed a normal-sized

gallbladder with a 13-mm outgrowth lesion, compatible with a gallbladder polyp. The tomography was repeated prior to the lymphadenectomy, where a significant growth of the gallbladder lesion up to 30 mm was observed (Fig. 1). The patient had no digestive symptoms at any time, and the hepatobiliary and pancreatic profiles showed no analytical alterations.

Given the findings, it was decided to perform a concomitant laparoscopic cholecystectomy at the same surgical time, which was carried out without incident. The anatomopathological study of the specimen confirmed the diagnosis of gallbladder metastasis due to epithelioid and spindle cell malignant melanoma (Fig. 2). The lymphadenectomy study showed 18 lymph nodes, all of them without tumor infiltration. Subsequently, an extension study was performed by PET-TAC, which showed involvement of a presacral ganglion and a single bone metastasis in the left iliac bone. It also showed hypermetabolic foci in the right prostatic lobe, of uncertain significance. The patient is alive and is undergoing oncological treatment with pembrolizumab.

Malignant melanoma is an aggressive neoplasm with a high tendency to metastasize. Gastrointestinal metastases, although described in the literature, are infrequent [1]. Regarding gallbladder metastases, there are only a few isolated reports in the scientific literature, and there is no consensus on optimal management. A recent review showed that

✉ Nerea Martín-Calvo
nmartincalvo@unav.es

¹ Pediatric Surgery Department, Hospital Universitario de Navarra, Pamplona, Spain

² General Surgery Department, Hospital Universitario de Navarra, Pamplona, Spain

³ Pathology Department, Hospital Universitario de Navarra, Pamplona, Spain

⁴ CIBER Fisiopatología de la Obesidad y Nutrición, Instituto de Salud Carlos III, Madrid, Spain

⁵ Department of Preventive Medicine and Public Health, School of Medicine, University of Navarra, Instituto de Investigación Sanitaria de Navarra (IdiSNA), Calle Irunlarrea 1, 31080 Pamplona, Spain



Fig. 1 Axial computed tomography slice of the patient. It shows a polypoid lesion inside the gallbladder

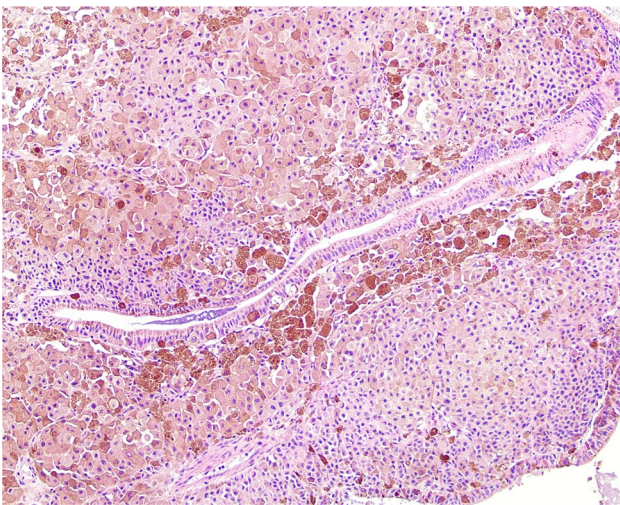


Fig. 2 Histological section of the gallbladder. Microphotography (H-E. ×10): biliary cylindrical epithelium is observed, infiltrated by melanocytic cells. The accompanying stroma is also infiltrated by this proliferation of large, atypical cells, with a large cytoplasm loaded with pigment and presence of a central and hyperchromatic nucleus of irregular contour

60% of the metastases present in the gallbladder correspond to malignant melanoma. The most probable route of dissemination is hematogenous, although dissemination via the biliary route cannot be excluded [1]. In series of autopsies performed on patients with melanoma, up to 20% of metastases have been found in the gallbladder, but the proportion of these patients diagnosed during life is much lower. This is probably related to the fact that gallbladder metastases are in most cases asymptomatic [1]. Although there are reports of high survival rate at 1-year follow-up after surgery in single gallbladder malignant melanoma metastasis [2], these results are different from those reported in other series. This seems to be related to

the fact that in most patients in whom gallbladder metastases are found, the disease is widespread. Given these findings, it seems reasonable to consider laparoscopic cholecystectomy in patients with localized and resectable disease [3].

In conclusion, melanoma metastases in the gallbladder are infrequent and constitute a diagnostic and therapeutic challenge. The presence of a gallbladder lesion in the context of a patient diagnosed with melanoma should establish the diagnostic suspicion of metastasis, and an early extension study and laparoscopic cholecystectomy should be considered. The palliative surgical approach to avoid hepatobiliary symptomatology can be considered (including biliary stenting and cholecystostomy), although the decision must be individualized.

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Declarations

Ethics Approval After consultation, the institutional board review of our center does not require evaluation of individual clinical cases or retrospective studies based on isolated cases. All the information in this document has been anonymized in accordance with current legislation and does not allow patient recognition.

Consent to Participate Prior to the submission of this article, verbal and written informed consent was obtained from the patient whose clinical photographs are included in this publication. The patients' medical records were accessed in accordance with the specific hospital regulations applicable to this type of case.

Consent for Publication All authors of the manuscript declare that it is an original contribution, not previously published, and that at the present time it has not been sent to any other journal to assess its publication.

Conflict of Interest The authors declare no competing interests.

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