

Melanoma of the gallbladder

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An 80-year-old man, with no medical history, was referred to the gastroenterologist due to cholestasis and altered general condition.

Physical examination revealed mild abdominal tenderness in the right hypochondrium, with no other clinical signs.

Laboratory examinations showed a cholestasis (gamma-glutamyl transferase: 160 U/L and alkaline phosphatase: 120 U/L) and an elevated CRP level of 25 mg/L.

Abdominal MRI was performed (Fig 1, Fig 2A).

Subsequently, a PET-CT and brain MRI for seizures (Fig. 2B) were realized.

What is the diagnosis?

The enhancing gallbladder mass was spontaneously hyperintense on fat-suppressed T1-weighted images.

These findings are highly suggestive of gallbladder melanoma.

The diagnosis was confirmed through pathological examination following percutaneous biopsies.

The tumor displayed hypermetabolism on PET-CT and hyperintense liver and brain metastases were also present on T1-weighted images without contrast administration.

Following a comprehensive physical examination, no melanoma was detected on the skin or mucosa.

On MRI, primary and metastatic melanomas typically show hyperintense signal on T1-weighted images due to the T1 melanin-shortening effect (1).

Melanoma of the gallbladder is an exceptionally rare condition (2).

Most reported cases are metastatic, and its existence as a primary tumor remains somewhat controversial (3). In fact, it is much more supposed to have metastasized from a regressed skin focus, rather than being *de novo*.

The gender distribution is nearly equal, and the highest incidence is observed between 40 and 60 years of age.

The majority of patients are asymptomatic at the time of diagnosis, and if symptoms are present, they tend to be non-specific. In certain cases, advanced disease may manifest as obstructive jaundice or acute cholecystitis.

Malignant melanoma has multiple sites of metastasis, with soft tissues, lungs, liver, skin, and brain being the most frequently affected locations.

The aggressiveness of malignant melanoma is extremely high, and the treatment options for gallbladder melanoma are limited due to the small number of patients affected.

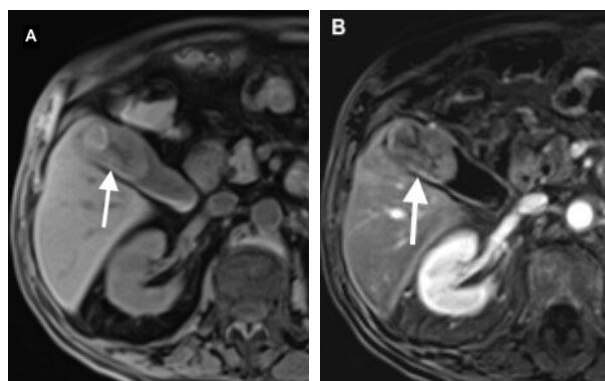


Fig. 1. — Axial fat-suppressed T1-weighted MRI without (A) and after (B) contrast administration demonstrates a heterogeneous gallbladder mass focally hyperintense (A) and enhancement (B).

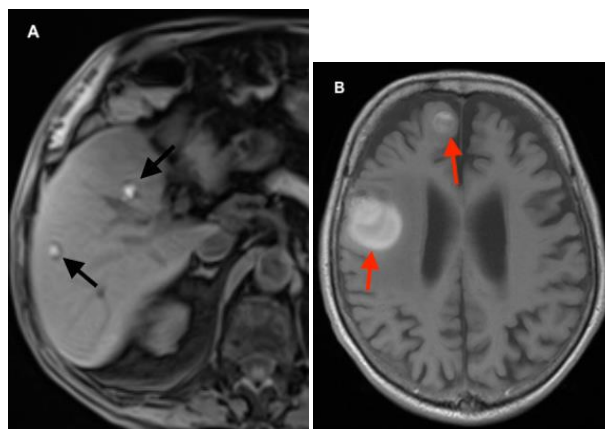


Fig. 2. — (A) Axial fat-suppressed T1-weighted MRI without contrast administration demonstrates two hyperintense liver lesions. (B) Axial T1-weighted MR image without contrast administration reveals two hyperintense lesions in the brain.

Therefore, the prognosis for primary or metastatic gallbladder melanoma is generally poor.

Conflicts of interest

The authors have no conflicts of interest and have no funding sources to declare.

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