

**Title:**

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## **CAPSULE endoscopy diagnosis of gastrointestinal melanoma**

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Dear Editor,

Melanoma is the cancer that most frequently metastasises to the small bowel (SB); some authors distinguish primary tumour when it is a single lesion, absence of metastasis and disease-free survival of at least 12 months from diagnosis (1). Only 1-5% are symptomatic. The vast majority, up to 60%, are diagnosed post mortem. The most common symptomatic presentation is gastrointestinal bleeding. It usually develops 3 to 6 years after cutaneous melanoma diagnosis. The initial diagnosis is made with CT, both for initial approach and follow-up (2-4). However, detection is limited due to the multifocality of the lesions because of their systemic spread. PET CT has a higher sensitivity and specificity. Subsequently, an endoscopic study is usually performed, but this only detects 10-20% of lesions. Currently, we know that early diagnosis and treatment of these lesions is important in terms of the impact of surgery

on the prognosis of the disease (4-6).

Our case is a 68-year-old male with a history of cutaneous melanoma in February 2020 with resection (T4bN3) and subsequent immunotherapy. There was no evidence of disease until June 2022, when he began with neurological symptoms, finding a lesion in the left frontal lobe. Resection and subsequent radiotherapy was decided. In January 2022 he started with melenas, where it was observed:

- CT scan: focal nodular thickening of a small bowel loop located in the right iliac fossa, probably ileum, with a neoplastic appearance. In addition, subcentimetric mesenteric lymph nodes were observed, the largest of 8 mm in the right flank-right iliac fossa, non-specific.
- Endoscopic capsule (EC): lesion of excrescent appearance in the middle jejunum, 10 mm in size, occupying 25% of the lumen, with active bleeding. Figure 1.
- PET CT scan: 2 adenopathies in the root of the mesentery with high cellular activity with infiltration at duodenal and jejunal level, coinciding with endoscopic capsule findings.

Therefore, with the EC we confirmed the suspicion of two small bowel lesions compatible with cutaneous melanoma metastasis. We decided to resect these lesions (resection of 30cm of small intestine including both lesions as well as the palpable adenopathies). Subsequently the pathological anatomy confirmed the diagnosis.

CE is a new technique that allows us to improve preoperative diagnosis and is capable of detecting segments of bowel that cannot be inspected by conventional endoscopy. It has a better resolution than conventional CT, improving sensitivity and allowing much better planning of the surgical intervention (4,5).

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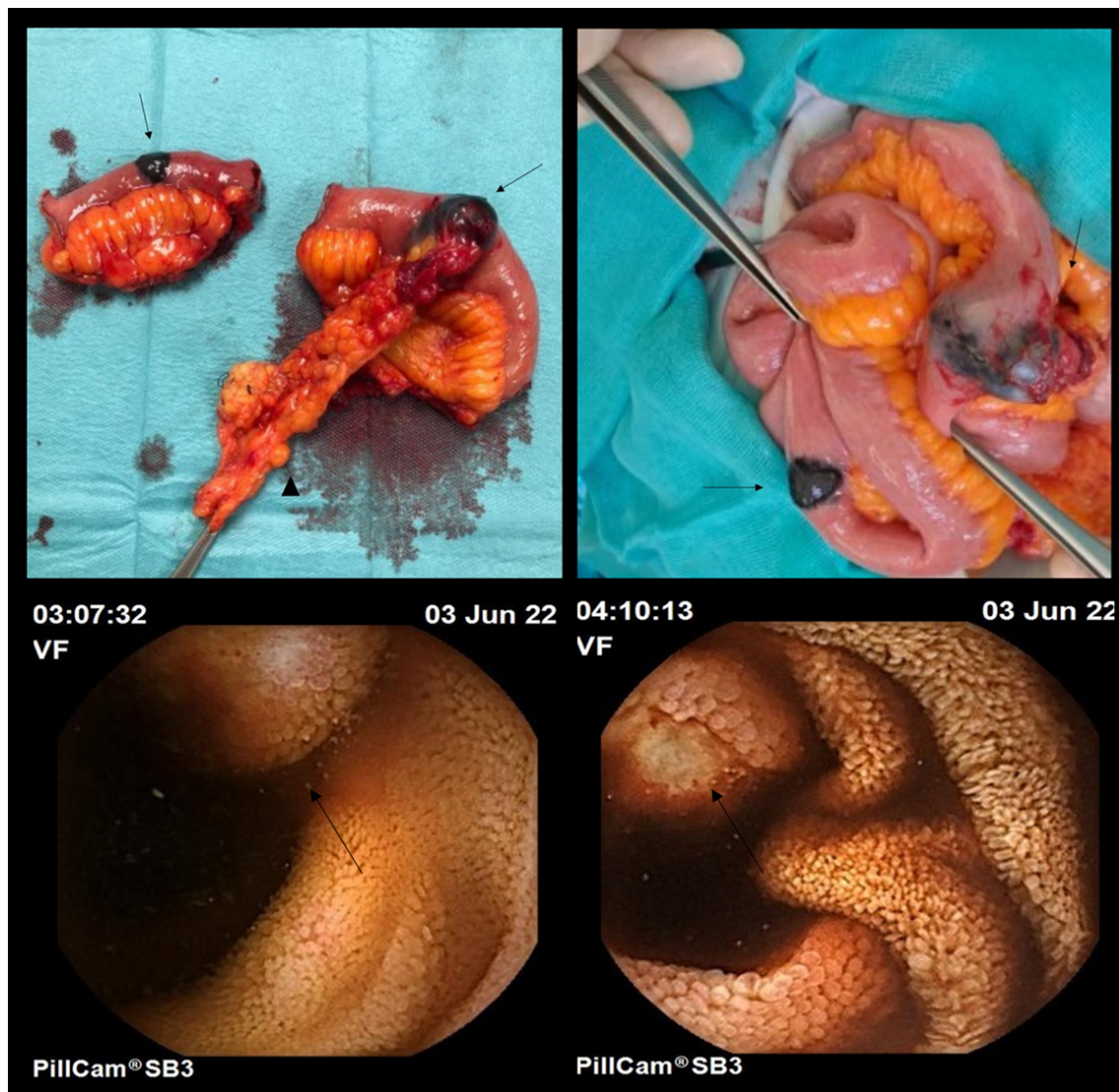


Figure 1. First row: excision of intestinal lesion (arrows) and adenopathy (triangle).  
 Second row: diagnosis of intestinal melanoma with capsule endoscopy.