

Video capsule endoscopy is useful in the management of metastatic malignant melanoma?

Abstract

The incidence of melanoma has been increasing over the years. Mortality and morbidity remains high despite new therapies. Dissemination occurs primarily by the lymphatic route and then by hematogenous route. Gastrointestinal metastases do occur, but they are mainly intraluminal mucosal melanomas. We report a case of a man of 52 years old with a history of suspected cutaneous melanoma who presented with rectal bleeding followed by recurrent episodes of melena, weight loss and severe anemia. Esophagogastroduodenoscopy and colonoscopy were performed without detecting any alteration except for the presence of a chronic atrophic gastritis, so a video capsule endoscopy was performed which showed, in the early jejunum, a substenosis from melanoma metastases associated with satellite lesions of whole jejunum. The patient was operated after being subjected to a computed tomography for staging the disease, but died after three months for the spread of disease. Since the melanoma incidence is rising, similar cases may present in the near future. This emphasizes the importance of a comprehensive study of the entire gastrointestinal tract endoscopy, highlighting the role of video capsule endoscopy as easy, noninvasive, and effective diagnostic procedures to carefully study the small bowel.

Keywords: melanoma, metastatic melanoma, video capsule endoscopy

Volume 2 Issue 3 - 2015

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Received: May 17, 2015 | **Published:** June 16, 2015

Abbreviations: VCE, video capsule endoscopy; EGD, esophagogastroduodenoscopy; CT, computed tomography

Introduction

Primary and secondary malignancies of small bowel are rare,¹ and more commonly found in the jejunum than the ileum, but primary adenocarcinomas are the most common, followed by carcinoids, lymphomas and stromal tumours.² Small bowel melanoma is usually metastatic, arising from the skin more often than the eye or anus, indeed, although neural crest cells embryologically migrate into the gut, mature melanocytes are a rare entity in the small bowel, so there is controversy as to whether small bowel melanoma can ever be considered primary, with some authors suggesting that an occult or regressed primary is always the original source (spontaneous regression of cutaneous melanomas can occur).³ The normal clinical presentation of gastrointestinal melanoma is similar to other malignancies, a change in bowel habit or obstructive symptoms, a palpable mass, rectal bleeding or anemia and fatigue, and pain.⁴

Case presentation

A 52-year-old man presented with rectal bleeding followed by recurrent episodes of melena, weight loss, severe anemia and diffuse abdominal pain, only occasionally overnight. He had undergone excision of a malignant melanoma on his left leg 6 years earlier and one year later he underwent excision of recurrence against the same leg. Physical examination revealed a diffuse tenderness in the whole abdomen, but no palpable mass. Laboratory tests showed anemia, increase in inflammatory markers, reduction of serum iron, ferritin and vitamin B12. Finally fecal occult blood test positive. Normal the remaining common laboratory tests performed. Colonoscopy showed a sigmoid diverticulosis, while the EGD revealed the presence of chronic atrophic gastritis *Helicobacter pylori* negative. He was then submitted to VCE enteroscopy that showed in the early jejunum a substenosis from melanoma metastases associated with satellite

lesions spread throughout jejunum (Figure 1). It was then submitted to a computed tomography (CT) for staging the disease in order to resect the sub-stenosis jejunal segment. CT showed two small (sub centimeter) metastatic liver lesions. Thereafter the patient underwent surgery for bowel resection but died after three months for the spread of disease.

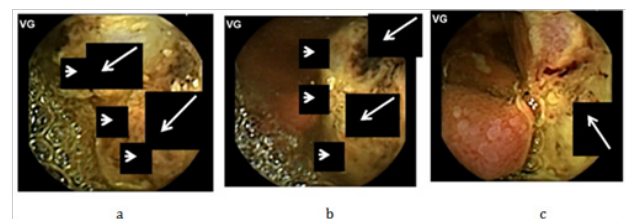


Figure 1a-c Neoplastic mass (arrowhead) (a, b) resulting in stenosis of the small intestine. Evident blackish pigments typical of melanoma (arrow) (a, b, c).

Discussion

The malignant melanoma is the most common cause of metastatic lesion in the gastrointestinal tract, representing about 33% of all the metastatic malignant tumors of the digestive tract. Small bowel represents the second most frequently involved organ after liver. The average time elapsed excision of primary cutaneous melanoma and the onset of bowel metastasis is about 3-6 years, although have been described cases of synchronous metastases or within 6 months of diagnosis, with a mean symptom-free interval between 6 and 90 months.⁵ Diagnosis is often delayed due to the course of the disease which is usually asymptomatic in the early stage, or associated with a specific abdominal symptoms such as abdominal pain, intestinal obstruction, lower gastrointestinal bleeding (overt or occult).^{1,6,7} The importance of routine investigations for patients with recently diagnosed melanoma is emphasized in order to discover occult stage IV disease and improve survival, but unfortunately there is not a common approach on the management of these patients.

EGD and colonoscopy are commonly used to identify bleeding from the upper or lower gastrointestinal tracts. Sometimes diagnosis could be obtained with computerized tomography (CT) even if its sensibility is poor. PET-CT scan is more sensitive in detecting visceral and GI metastases than PET alone or CT alone, despite does not allow an accurate location of the lesions.⁷ VCE is a useful imaging technique for the evaluation of occult gastrointestinal bleeding. In these settings of patients retention of VCE is a rare procedural complication secondary mostly to NSAID enteropathy and to lesser extent small bowel tumors. The majority of the cases with capsule retention are asymptomatic, although there is a potential risk of acute small bowel obstruction or perforation.⁸ Indeed in patients with metastatic melanoma, the VCE has proved more effective than PET-CT in identifying the involvement of the small intestine.⁷ Surgical exploration with bowel resection remains the standard of care, especially for patients with limited spread of the disease. However, surgery is not curative and it should be considered as a good mean of palliation with a chance of improving prognosis when free surgical margins can be achieved.^{1,9} Postoperative chemotherapy is sometimes administered as further palliative treatment although evidence of its effectiveness is currently lacking.⁷ As the presence of metastatic disease influence the prognosis of patients with malignant disease, and being metastases from melanoma quite common in the small bowel, their early diagnosis can improve survival, so we believe that EGD, colonoscopy and VCE, associated with an examination such as CT or PET-CT (able to study all the organs looking for any lesions), should be performed in all patients with melanoma both the diagnosis and in follow-up.

Acknowledgments

None.

Conflicts of interest

Authors declare there are no conflicts of interest.

Funding

None.

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