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Clinical Case Study

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Widespread Metastatic Uveal Melanoma with Gastrointestinal and Gallbladder Involvement: A Case Report

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Keywords
Melanoma · Gastrointestinal metastasis · Gallbladder metastasis · Iron deficiency anaemia

Abstract
Introduction: Melanoma is a malignant tumour arising from melanocytes, with cutaneous melanoma accounting for the vast majority of cases. Less frequently, melanomas originate from extracutaneous melanocytes, including those of the uveal tract. Although primary gastrointestinal melanomas exist, gastrointestinal involvement by melanoma more commonly represents metastatic disease. Recognition of gastrointestinal metastatic lesions and their variable endoscopic appearance has become increasingly relevant with the advances in systemic therapies. ***Case Presentation:*** We report a case of a 74-year-old man referred for investigation of iron-deficiency anaemia. Esophagogastroduodenoscopy revealed multiple flat, dark millimetric lesions in the distal oesophagus, stomach, and duodenum. Histopathological examination with immunohistochemistry revealed melanoma. Cross-sectional imaging and positron emission tomography demonstrated widespread metastatic disease involving the liver, lungs, brain, bone, and gallbladder, as well as a hypermetabolic intraocular lesion. Ophthalmological and dermatological evaluation was consistent with primary uveal melanoma, with no evidence of a cutaneous primary. The patient experienced rapid neurological deterioration due to brain metastases and died shortly after diagnosis. ***Conclusion:*** Gastrointestinal metastases of melanoma are rare, particularly in uveal melanoma, and are often clinically silent. Endoscopic findings are heterogeneous and may be detected during the investigation of nonspecific symptoms such as anaemia. This case highlights the importance of recognising and sampling atypical pigmented gastrointestinal lesions, as endoscopy may play a key role in the diagnosis of advanced melanoma and prompt multidisciplinary management.

Melanoma da úvea metastizado com envolvimento gastrointestinal e da vesícula biliar: Caso Clínico

Palavras Chave
Melanoma · Metástases gastrointestinais · Metástases da vesícula biliar · Anemia ferropénica

Resumo
Introdução: O melanoma é um tumor maligno com origem em melanócitos, sendo o melanoma cutâneo responsável pela grande maioria dos casos. Menos frequentemente, os melanomas têm origem em

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melanócitos extracutâneos, incluindo os da úvea. Embora existam melanomas gastrointestinais primários, o envolvimento gastrointestinal por melanoma representa mais comumente doença metastática. O reconhecimento das lesões metastáticas gastrointestinais e do seu aspeto endoscópico variável tem-se tornado cada vez mais relevante com os avanços nas terapêuticas sistémicas. ***Caso Clínico:*** Apresentamos o caso de um homem de 74 anos encaminhado para investigação de anemia ferropénica. A endoscopia digestiva alta revelou múltiplas lesões planas, escuras e milimétricas no esófago distal, estômago e no duodeno. O exame histopatológico com imunohistoquímica revelou tratar-se de metástases de melanoma. Os exames de imagem e a tomografia por emissão de positrões demonstraram doença metastática disseminada envolvendo fígado, pulmões, cérebro, ossos e vesícula biliar, bem como uma lesão intraocular hipermetabólica. A avaliação oftalmológica e dermatológica foi compatível com melanoma primário da úvea, sem evidência de tumor primário cutâneo. O doente apresentou uma rápida deterioração neurológica devido a metástases cerebrais e faleceu pouco tempo após o diagnóstico. ***Conclusão:*** As metástases gastrointestinais do melanoma são raras, particularmente no melanoma da úvea, e são frequentemente clinicamente silenciosas. Os achados endoscópicos são heterogéneos e podem ser detetados durante a investigação de sintomas inespecíficos, como a anemia. Este caso realça a importância de reconhecer e biopsar lesões gastrointestinais pigmentadas atípicas e enquadrá-las no contexto clínico, dado que a endoscopia pode desempenhar um papel fundamental no diagnóstico de melanoma avançado e na referenciação atempada para tratamento multidisciplinar.

Introduction

Melanoma is a malignant tumour caused by the unregulated proliferation of melanocytes. Cutaneous melanoma is one of the most common cancers worldwide [1], and it represents over 95% of all melanoma cases [2]. Rarely, melanomas can arise from extracutaneous melanocytes in the mucosal membranes of the oral and nasal cavities, conjunctiva, and other mucosae [3]. Uveal melanoma is the most common primary intraocular tumour and the second most common type of melanoma [4]. Although primary gastrointestinal melanomas exist, melanoma involvement of the gastrointestinal tract more commonly represents metastatic disease [2]. Importantly, given the declining mortality rates of metastatic melanomas due to targeted therapies [1], recognising these lesions and their varying endoscopic appearance is of growing importance.

Case Presentation

A 74-year-old man with a history of epilepsy, arterial hypertension, and diabetes was referred to the endoscopy unit for investigation of iron-deficiency anaemia. The patient did not report previous overt blood loss, abdominal pain, dysphagia, or any other gastrointestinal symptoms. There was no history of alcohol abuse or smoking. Colonoscopy was unremarkable. The oesophagogastroduodenoscopy revealed multiple dark, flat millimetric lesions in the lower oesophagus, the body of the stomach, and all of the duodenum (shown in Fig. 1), and multiple biopsies were performed. The histopathological analysis and immunohistochemical staining revealed neoplastic cells with cytoplasmic positivity for HMB45, Melan A, and S-100. The cervico-thoracic-abdominopelvic computed tomography (CT) scan showed bilateral lung nodules, multiple liver focal lesions, and multiple gallbladder wall nodules, suggestive of metastasis (shown in Fig. 2). The cranioencephalic CT scan also revealed multiple cortico-subcortical supra and infratentorial lesions, and one hyperdense right intraocular nodule, measuring 14 × 9 × 16 mm. PET scan also showed a hypermetabolic spot in the external region of the right ocular globe, compatible with a primary tumour, as well as multiple hypermetabolic spots in the brain, liver, lungs, and bone (shown in Fig. 3). The patient underwent a complete dermatological examination, which found no suspicious nevi, as well as an ophthalmological evaluation, which described a solid right intraocular tumour, compatible with primary uveal melanoma.

The patient was assessed by the oncology team, which requested the BRAF mutation testing, but the patient quickly developed paraesthesia secondary to the brain metastasis. Prednisolone was started due to concern that the paraesthesia was secondary to peritumoural brain oedema, but 2 weeks later, the patient was brought to the emergency department in a stuporous state, and a cranioencephalic CT scan showed multiple actively bleeding brain lesions. The patient was admitted for symptomatic care and, unfortunately, died 24 days after diagnosis.

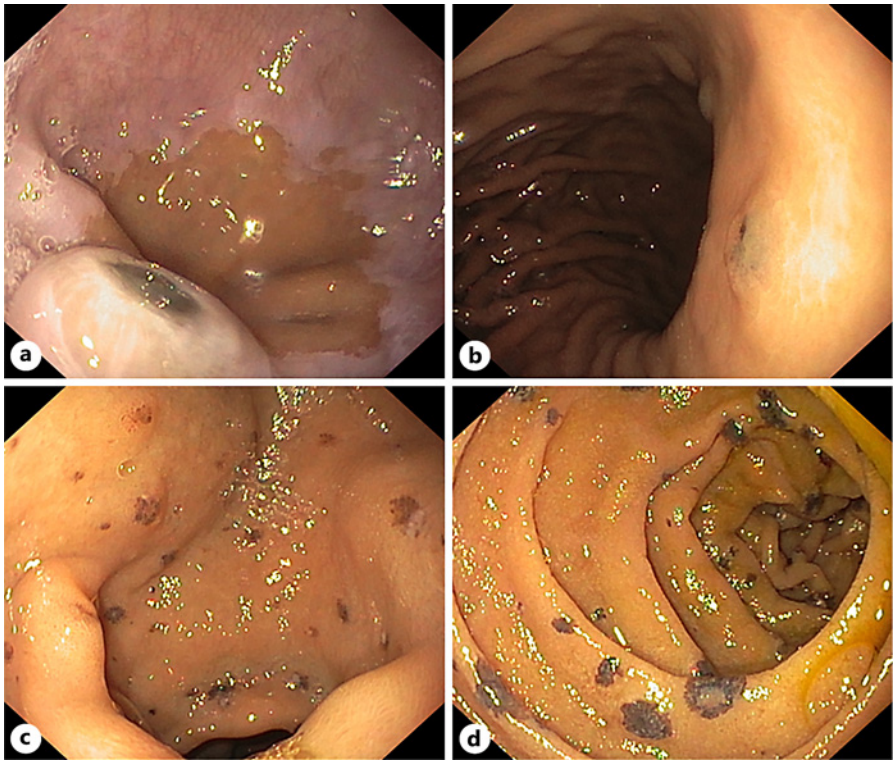

Fig. 1. Esophagogastroduodenoscopy findings: multiple dark, flat millimetric lesions in the lower oesophagus, the body of the stomach, and the duodenum. **a** Distal oesophagus. **b** Body of the stomach. **c** First portion of the duodenum. **d** Second portion of the duodenum.

Discussion

Metastatic involvement of the gastrointestinal tract by malignant melanoma is uncommon and usually reflects advanced disease. Uveal melanoma has a distinct biological behaviour from cutaneous melanoma, with marked tropism for the liver and, frequently, exclusive hepatic involvement [4] due to predominantly haematogenous spread [4, 5]. Metastasis to the gastrointestinal tract, although possible, is rare and is associated with a high mortality rate [4]. Metastatic melanoma to the gallbladder, in particular, is rarely diagnosed, although melanoma is the most common primary tumour identified in gallbladder metastases [6]. Multiorgan dissemination at diagnosis, such as observed in our patient, is rare and associated with a particularly poor prognosis.

Gastrointestinal melanomas are often asymptomatic or present with nonspecific symptoms and may remain undetected during patients' lifetime. Endoscopic findings are also heterogeneous, ranging from pigmented to amelanotic lesions, and from flat mucosal lesions to ulcerated or polypoid masses [7]. In this case, the presence of multiple flat, dark lesions throughout the upper gastrointestinal tract illustrates a remarkable endoscopic presentation and highlights the need for a high index of suspicion and biopsy of atypical mucosal findings.

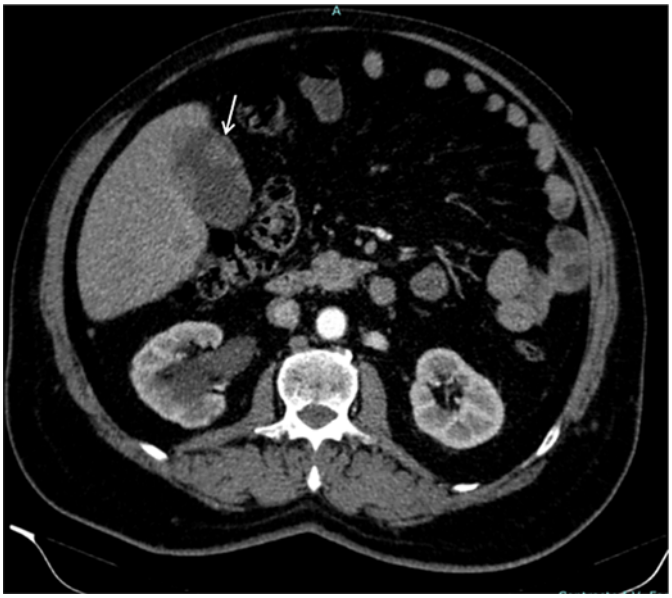

Fig. 2. CT findings showing gallbladder metastasis (arrow).

Distinguishing between primary gastrointestinal melanoma and metastatic disease still represents a diagnostic challenge [7]. The absence of suspicious cutaneous lesions, combined with ophthalmological findings

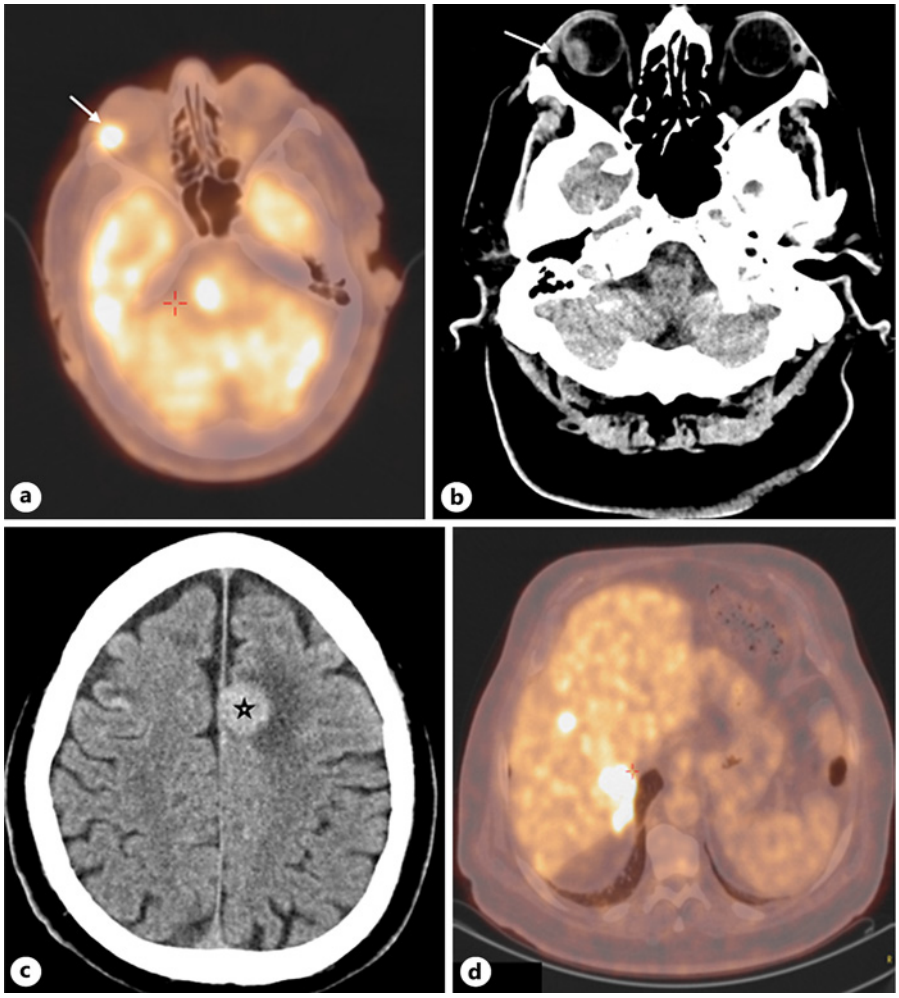

Fig. 3. PET and cranioencephalic CT scans showing the primary tumour and metastasis. **a** Hypermetabolic spot in the external region of the right ocular globe on the PET scan (white arrow). **b** Hyperdense right intraocular nodule on the cranioencephalic CT scan (white arrow). **c** Brain metastasis and surrounding brain oedema on the cranioencephalic CT scan (star). **d** Hypermetabolic spots in the liver.

and whole-body imaging, was crucial in identifying the uveal origin of the tumour, one of the few malignancies that can be diagnosed based on clinical and imaging finding without tissue sampling. Immunohistochemical positivity for melanocytic markers, including HMB45, Melan-A, and S-100, confirmed the diagnosis of melanoma [8].

The prognosis of metastatic uveal melanoma remains poor, particularly in the presence of liver and brain metastases [9]. Although recent advances in targeted and immunotherapies have improved outcomes in cutaneous melanoma [1], systemic therapies in metastatic uveal melanoma are still limited [5, 9]. The rapid clinical deterioration observed in this patient underscores the aggressive nature of the disease.

In conclusion, this case emphasises the importance of recognising metastatic melanoma as a potential cause of atypical gastrointestinal lesions and iron-deficiency anaemia. Endoscopists should be aware of the diverse endoscopic appearances of melanoma metastases, as early recognition may facilitate prompt diagnosis and multidisciplinary management.

Statement of Ethics

Approval by the Ethics Committee was waived in accordance with local regulations. Consent to publish this case report and accompanying images was obtained from the patient's family. The CARE Checklist for this case report is available as online supplementary material (for all online suppl. material, see https://doi.org/10.1159/000551817)

Conflict of Interest Statement

The authors have no relevant conflicts of interest to disclose.

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Author Contributions

Raquel Oliveira: conceptualisation, data curation, and writing – original draft; Margarida Portugal: data curation and writing – review and editing; Joana Roseira and Bruno Peixe: writing – review and editing.

Data Availability Statement

All data generated or analysed during this study are included in this article. Further enquiries can be directed to the corresponding author.

References

1 Sung H, Ferlay J, Siegel RL, Laversanne M, Soerjomataram I, Jemal A, et al. Global cancer statistics 2020: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA Cancer J Clin. 2021;71(3):209–49. https://doi.org/10.3322/caac.21660

2 Schizas D, Tomara N, Katsaros I, Sakellariou S, Machairas N, Paspala A, et al. Primary gastric melanoma in adult population: a systematic review of the literature. ANZ J Surg. 2021;91(3):269–75. https://doi.org/10.1111/ans.16160

3 Elder DE, Bastian BC, Cree IA, Massi D, Scolyer RA. The 2018 world health organization classification of cutaneous, mucosal, and uveal melanoma: detailed analysis of 9 distinct subtypes defined by their evolutionary pathway. Arch Pathol Lab Med. 20202020; 144(4):500–22. https://doi.org/10.5858/arpa.2019-0561-RA

4 Bustamante P, Piquet L, Landreville S, Burnier JV. Uveal melanoma pathobiology: metastasis to the liver. Semin Cancer Biol. 202171:65–85. https://doi.org/10.1016/j.semcancer.2020.05.003

5 Garbe C, Amaral T, Peris K, Hauschild A, Arenberger P, Basset-Seguin N, et al. European consensus-based interdisciplinary guideline for melanoma. Part 2: treatment – update 2024. Eur J Cancer. 2025; 215:115153. https://doi.org/10.1016/j.ejca.2024.115153

6 Khan A, Patel S, Zaccarini DJ, McGrath M. Metastatic melanoma of the gallbladder in an asymptomatic patient. Case Rep Gastrointest Med. 2017;2017:1767418. https://doi.org/10.1155/2017/1767418

7 Reggiani HC, Pongeluppi ACA, Ferreira V, Felix IP, de Oliveira Campoli PM. Endoscopic diagnosis of gastric metastases from malignant melanoma: systematic review. Clin Endosc. 2022;55(4):507–15. https://doi.org/10.5946/ce.2022.035

8 Voiculescu VM, Popescu AI, Costache M. Immunohistochemistry for skin cancers: new insights into diagnosis and treatment of melanoma. Cancers (Basel). 2025; 17(11):1769. https://doi.org/10.3390/cancers17111769

9 Wiens L, Grözinger G, Dittmann H, Thiel K, Leiter U, Amaral T, et al. Melanoma-specific survival of patients with uveal melanoma and liver metastases diagnosed between 2005 and 2021. Ther Adv Med Oncol. 2024;16: 17588359241273020. https://doi.org/10.1177/17588359241273020