Small Bowel Mass: Metastatic Malignant Melanoma Of Unknown Primary; A Case Report.

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Citation

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Abstract

Malignant melanoma shows an unusual predilection to metastasize to the small intestine. The prevalence of malignant melanoma in the gastrointestinal tract without any evidence of a primary lesion in the skin or any other site is extremely rare. We present a case of a 58-year-old woman with metastatic melanoma of the small bowel with unknown primary.

CASE HISTORY

A 58-year-old woman presented with increasing left iliac fossa pain, bloating, and a significant weight gain of nearly 8 kilograms for few months. She was a smoker, but did not drink alcohol and had no other significant past medical history.

The patient had a CT scan, which was reported as normal, MRI scan showed a pelvic mass with fat and air in it, for which origin was unclear (Figure 1, 2). A decision was made to undertake a diagnostic laparoscopy, which revealed a small bowel mass, the operation was converted to a laparotomy, which showed a large terminal ileal mass, which was superficially adherent to the urinary bladder and to the left Fallopian tube, the liver was clear and there were no peritoneal deposits and no ascites.

The tumour was freed from the urinary bladder, a small bowel resection and a primary anastomsis was performed; and the patient had an uneventful postoperative recovery. The histology report confirmed metastatic malignant melanoma (Figure 3, 4).

The patient was referred for oncology opinion. Adjuvant chemotherapy was not indicated as per local guidelines. A follow-up CT scan was performed 6 months after the original surgery and it proved the absence of any recurrent or metastatic disease.

Figure 1

Figure 1: Axial MRI showing the abdominal mass.

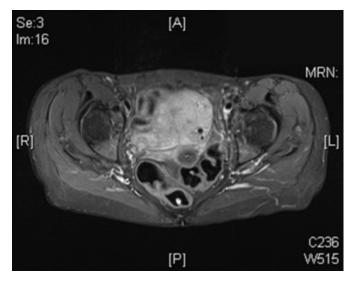


Figure 2

Figure 2: Sagittal view of MRI showing the abdominal mass.

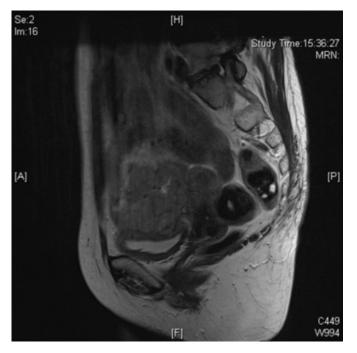
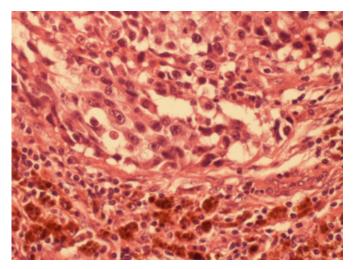


Figure 3

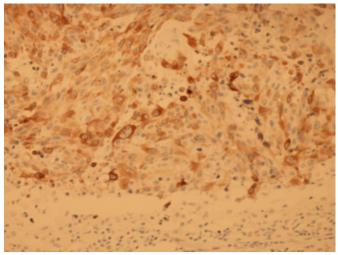
Figure 3: H and E stain; magnification x400



The image shows an infiltrate of atypical epithelioid cells within the small bowel wall. Towards the bottom end of the photograph there is abundant brown pigment (melanin).

Figure 4

Figure (4): Melan A antibody immunohistochemical stain; magnification X 200



The image shows that the atypical cells are immunoreactive for the antibody Melan A, staining brown. This confirms the diagnosis of malignant melanoma.

DISCUSSION

Malignant melanomas account for 1 to 3% of all malignant lesions of the gastrointestinal tract⁽¹⁾. The majorities of these cancers represent metastatic spread from a primary site, usually in the skin, but may originate from retina, anus, and nail bed⁽²⁾. Most patients with gastrointestinal metastases by malignant melanoma are asymptomatic and the symptoms, when present, are vague and non-specific.

Anemia is reported in 70% and acute upper GI bleeding in 50% of the patients with metastatic melanomas to the gastrointestinal tract⁽³⁾, while others documented abdominal pain (60%), bowel obstruction (47%), nausea and vomiting (41%), and gastrointestinal bleeding $(30\%)^{(4)}$. Symptoms and signs of acute appendicitis, malabsorption and protein-losing enteropathy may also be the presenting features^(5,6). An abdominal mass can be identified in only 10% of the patients⁽⁷⁾.

Furthermore, patients with no apparent systemic disease who develop chronic blood loss or vague abdominal symptoms should undergo careful endoscopic and radiological evaluations. Usually, gastroduodenoscopy and colonoscopy are employed for the evaluation of patients with suspected gastrointestinal tract pathology. However, in patients with small bowel lesions, these investigations are often negative. The estimated sensitivity of these studies is only 60-70% in patients presenting with small bowel lesions.⁽⁸⁾. A high

quality small bowel enema should be considered, therefore, in cases where no obvious source of bleeding is found⁽⁹⁾. Capsule endoscopy effectively identifies small bowel tumors that are undetectable by conventional radiological studies (diagnostic impact = 52.6%) and can critically change the therapeutic course (therapeutic impact = 12.3%)⁽¹⁰⁾.

Although patients with gastrointestinal tract metastases from melanoma carry a poor prognosis, almost all patients with melanoma and gastro-intestinal tract metastases can have palliation of symptoms by surgical resection with minimal morbidity and mortality⁽⁹⁾. Indeed, five-year survival rates of 28% have been reported following complete resection of melanomatous gastrointestinal metastases in patients whose primary lesions had been successfully excised⁽¹¹⁾.

CONCLUSION

Pre-operative diagnosis of small bowel metastases from malignant melanoma is very difficult. Delayed presentation; non-specific symptomatology and low diagnostic yield of the available investigations pose a clinical challenge for preoperative and early diagnosis of metastatic malignant melanoma. New investigations such as capsule endoscopy and MRI enterography might have a future role to play in facilitating the diagnosis.

Surgical resection remain always a main stay of treatment, though the prognosis remains always guarded once the pathology has been confirmed

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