

Jejuno-jejunal intussusception: An unusual presentation of malignant melanoma

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CASE STUDY

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ABSTRACT

Jejuno-jejunal intussusception is a rare mode of metastatic melanoma presentation, with only six cases being reported in the English medical literature to date. We present a case of a 55-year-old female who presented to us with features of obstruction. On exploration, it was discovered that she had jejuno-jejunal intussusception, with enlarged blackened mesenteric lymph nodes. Resection and anastomosis were performed. On further histopathological examination, a lesion was found to be a metastatic malignant melanoma.

Key Words

jejuno-jejunal; intussusceptions; malignant; melanoma; metastasis

Implications for Practice:

1. What is known about this subject?

Malignant melanoma is known to metastasise to the intestine, but is a rare cause of intussusception.

2. What new information is offered in this case study?

Melanoma can rarely metastasise to the jejunum, which can serve as a lead point for intussusception.

3. What are the implications for research, policy, or practice?

One should suspect intussusception as a cause of obstruction in a patient diagnosed with melanoma.

Background

It is unusual for a cutaneous melanoma to metastasise to the intestine, but it is even rarer for that metastatic nodule to act as a lead point and result in intussusception. Numerous cases of ileo-ileal intussusception have been reported in the English medical literature, but only six cases of jejuno-jejunal intussusception are documented. Patients with such metastatic lesions can present with features of obstruction or bleeding. The rarity of this presentation is the prime reason for reporting this case.

Case details

A 55-year-old female patient presented to the emergency outpatient department, having suffered severe colicky pain in her abdomen for the past two months, which was initially periumbilical but had spread to the right upper abdomen. It was associated with bilious vomiting, abdominal fullness, and constipation. A history of weight and appetite loss was present. She had also noticed a few hyperpigmented patches on her skin for the few months prior to presentation, which she had ignored.

On examination, pallor was present, multiple irregular hyperpigmented melanotic patches were present on the skin, and a solitary small lesion was present on the tongue. She had vitiligo patches around her oral cavity and in the left submammary region. Moderate distension and diffuse tenderness were present in her abdomen without any guarding or rigidity. On investigation, haemoglobin was 7.5gm/dl. Upper gastrointestinal endoscopy was normal. Ultrasonography suspected a 3x3cm small bowel mass

lesion with the presence of target sign suggestive of intussusception. During a contrast enhanced CT (CECT) scan of the abdomen, jeuno-jejunal intussusception was noted in the right lumbar region with multiple subcentimetric pre- and para-aortic lymph nodes and minimal pericardial effusion with maximum thickness of 17mm (Figure 1).

Figure 1: CT scan image showing jeuno-jejunal intussusception

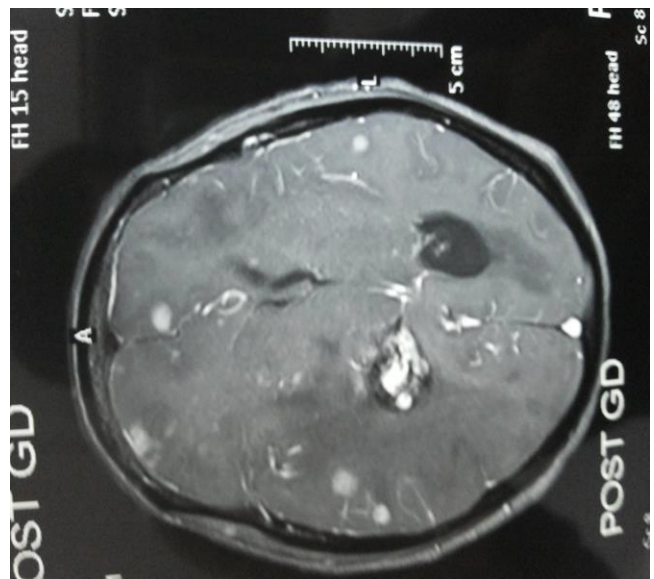


Exploratory laparotomy with resection and anastomosis of jejunal intussusception was done (Figure 2). Multiple black coloured nodules were present in the mesentery. Two more melanotic lesions were present in the jejunum approximately 0.91 metres distal to the duodeno-jejunal junction. The biopsy report was positive for malignant melanoma. On postoperative day 5, the patient was disoriented. An MRI brain scan was done which revealed multiple metastatic lesions involving fronto-parietotemporal lobes with a large haemorrhagic lesion in the medial aspect of the right temporal and parietal lobes (Figure 3). The patient died on postoperative day 10.

Figure 2: Pre-operative image of jeuno-jejunal intussusception



Figure 3: MRI image of metastatic lesions in the brain



Discussion

Though malignant melanoma is the most common cause of the extra-abdominal source of intestinal metastasis, it is rare to find them presenting as jeuno-jejunal intussusception.³ To date in the English medical literature, only six cases of jeuno-jejunal intussusception with melanoma as the lead point have been documented.^{1,4-7,8}

Rare reports of primary gastrointestinal melanoma have been documented. It occurs due to the malignant transformation of locally migrated primordial skin melanoblastic cells during foetal development.¹⁰ Most cases of gastrointestinal involvement in melanoma stem from metastasis from primary cutaneous melanoma. Gastrointestinal metastasis is very rare and is seen in three to five per cent of cases⁹ and is classified as stage four terminal disease with an average life span of two months to 15 years following diagnosis.³

Most melanoma patients present early with the sudden appearance of a growing hyperpigmented patch on their skin. The delayed presentation is seen mainly in developing countries because of lack of medical knowledge, poverty, neglect, and lack of proper management. The presentation of a patient with a primary gastrointestinal melanoma is usually late, not occurring until he or she develops features of obstruction or may present with non-specific symptoms like nausea, vomiting, abdominal pain, and bleeding.³

Excision biopsy is the preferred method of investigation to diagnose cutaneous melanoma. In our case, the patient initially presented with features of intestinal obstruction, which were investigated by ultrasonography and CECT scan.

A study by Karmiris et al. showed that CT scans have a sensitivity of 70 per cent in diagnosing such lesions.²

Treatment in metastatic melanotic intussusceptions with obstruction is palliative and involves resection and anastomosis of the involved segment of the gut. It relieves obstruction and also helps in the control of blood loss. Reduction should not be attempted if malignancy is suspected.¹¹

Conclusion

One should suspect metastatic melanoma as a lead point in cases of jejuno-jejunal intussusception in patients presenting with obstruction.

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PEER REVIEW

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CONFLICTS OF INTEREST

The authors declare that they have no competing interests.

PATIENT CONSENT

The authors, Malik P, Mandia R, Maheshwari R, Sharma DC, declare that:

1. They have obtained written, informed consent for the publication of the details relating to the patient(s) in this report.
2. All possible steps have been taken to safeguard the identity of the patient(s).
3. This submission is compliant with the requirements of local research ethics committees.