# A Rare Cause of Chronic Iron Deficiency Anaemia: A 13 cm Jejunal Venous Haemangioma Mimicking Malignancy



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#### **ABSTRACT**

Introduction: Small bowel pathology is rare and often overlooked when routine endoscopies are normal. Venous haemangiomas of the small bowel are exceptionally rare (<0.05% of GI neoplasms) and are usually small, asymptomatic, and incidental findings.

Case Presentation: We report the case of a 36-year-old male lorry driver with a 19-year history of unexplained IDA (Hb 75 g/L, ferritin 2 μg/L) despite iron supplementation. Multiple negative investigations including OGD, colonoscopy, capsule endoscopy, and enteroscopy done. Imaging (MRI, PET-CT) suggested a hypervascular ileal lesion suspicious for malignancy. Following MDT discussion, the patient underwent laparoscopic small bowel resection. Intraoperatively, a 13 cm thickened jejunal segment was identified. Histopathology confirmed a benign venous haemangioma without atypia or malignancy. Postoperatively, haemoglobin normalised and symptoms resolved.

**Conclusion**: This case highlights the diagnostic challenges of obscure small bowel bleeding and the importance of considering rare benign lesions such as venous haemangiomas in chronic IDA. Early small bowel evaluation with capsule endoscopy and enteroscopy may shorten diagnostic delay and guide definitive surgical management.

## **Keywords**

Iron deficiency anaemia; Jejunal haemangioma; Small bowel tumour; Capsule endoscopy; Vascular malformation; Obscure gastrointestinal bleeding.

#### Introduction

Iron deficiency anaemia (IDA) is one of the most common haematological disorders worldwide, typically caused by nutritional deficiency, menstrual blood loss, or chronic gastrointestinal bleeding. When both upper and lower gastrointestinal endoscopies are normal, small bowel pathology becomes a crucial differential but remains diagnostically challenging due to limited accessibility.

Venous haemangiomas of the small intestine are rare vascular malformations, representing less than 0.05% of all gastrointestinal neoplasms. Most are small, asymptomatic, and detected incidentally, whereas larger lesions may present with obscure gastrointestinal bleeding or iron deficiency anaemia. Here, we describe a unique case of a large 13 cm jejunal venous haemangioma mimicking malignancy and causing chronic IDA over nearly two decades.

## **Case Presentation**

A 36-year-old male lorry driver, occasional alcohol consumer, non-smoker, presented with worsening fatigue, exertional dyspnoea, and longstanding anaemia. He denied weight loss, abdominal pain, altered bowel habits, melaena, or rectal bleeding. He reported iron deficiency anaemia since the age of 17, requiring repeated courses of oral iron supplementation with transient benefit.

**Past history**: Appendicectomy. No family history of malignancy. **Clinical examination**: Normal, with no organomegaly or lymphadenopathy.

### Laboratory findings

Hb 75 g/L (severely reduced),

Microcytosis (MCV 63 fL),

Ferritin 2 μg/L,

Normal B12 and thyroid function,

Folate borderline low (3 μg/L).

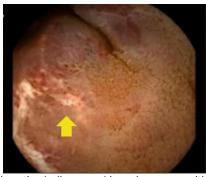
Peripheral blood smear showed thrombocytosis and anisocytosis consistent with IDA.

FIT test was positive (39.8 μg/g).

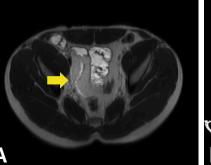
### Investigations:

- OGD and Colonoscopy: Normal, biopsies negative, CLO test negative.
- <u>Capsule Endoscopy</u>: Mucosal ulceration, unclear localisation.
- <u>Balloon-assisted Enteroscopy</u>: Small erosion and aphthous ulcers in jejunum, no obvious mass.
- MRI Small Bowel: Enhancing 95 mm segmental semi-annular thickening in distal ileum, suspicious for malignancy.
- <u>PET-CT</u>: Long segment mural thickening, differential diagnosis included Crohn's disease, TB, or neoplasm.





psule endoscopy demonstrating a mucosal ulceration (yellow arrow) irregular mucosa w surrounding ervthema. suggestive of active small bowel inflammation.

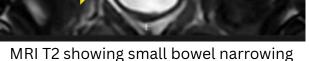




A) Small bowel MRI – Axial view showing abnormality (highlighted by yellow arrows) ir the small bowel loops B) CT Abdomen pelvis showing the axial imaging of the tumour

#### **Operative findings**

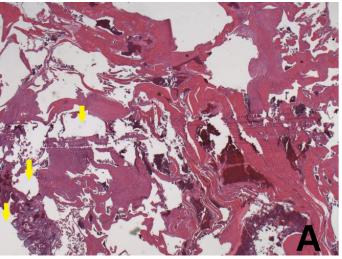
Laparoscopic small bowel resection performed. A 13 cm contiguous segment of thickened mid-ileum with abnormal serosa was resected. No mesenteric lymphadenopathy or peritoneal disease.

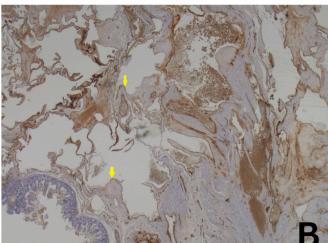




### Histopathology:

A - The H&E,2x shows the mucosa on one aspect and the vascular spaces (tumour) with haemorrhage extending through the bowel wall. B - Immunohistochemistry VWF,2x stains the endothelial cells of the vessels.





### Discussion

- Rarity: Small bowel venous haemangiomas are very rare, usually <2 cm.
- Unusual features: This case had a 13 cm lesion, ~20 years of chronic anaemia, and radiological mimicry of malignancy.

## Diagnostic challenges:

- Negative OGD & colonoscopy → delayed diagnosis.
- Capsule endoscopy & enteroscopy → inconclusive.
- Cross-sectional imaging suggested malignancy → MDT referral.

### Literature context:

- <50 reported cases; most <5 cm.
- Larger lesions → more likely chronic IDA or overt bleeding.
   Surgical resection = gold standard for diagnosis & treatment.

# Learning Points

- Persistent IDA with normal bidirectional endoscopy → early small bowel evaluation.
- Large venous haemangiomas may mimic neoplasms radiologically.
  - MDT input is essential in obscure GI bleeding.

### Conclusion

Rare benign small bowel vascular lesions should be considered in longstanding IDA with inconclusive endoscopies.

Early small bowel imaging and timely surgery can be curative and prevent years of morbidity.

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