Lipoma of the small bowel
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Patient: 57 years, female

Clinical History:

Melena and iron deficiency anemia due to small bowel lipoma in a 57 year old female patient.

Imaging Findings:

A 57 year old woman was admitted to hospital because of melena and iron deficiency anaemia. The patient did not complain of any other specific symptoms. Her medical history included hypertension and diabetes. Gastroscopy and colonoscopy were unremarkable. Capsule endoscopy (CE) revealed a tumour protruding to the bowel lumen, covered with normal mucosa and a superficial ulcer (Fig 1). The mucosa in the rest small intestine was normal. CT enteroclysis (CT-E using a neutral contrast media to distend the small bowel lumen and IV contrast media to enhance the intestinal wall was performed to evaluate tumour localization, morphology, vascularity and extension. A well circumscribed, solid, homogeneous intraluminal tumour was demonstrated. The tumour was located in the distal jejunum without causing any prestenotic dilatation or obstruction (Fig 2). CT density values (-85HU) of the lesion were consistent with fatty tissue. No other abnormalities were disclosed on CT-E. The patient underwent partial enterectomy and pathology diagnosed small bowel lipoma (Fig 3). No signs of gastrointestinal bleeding or iron deficiency anaemia were observed during a 6 months follow up period.

Discussion:

The most common causes of occult or overt obscure bleeding in the small bowel are vascular ectasias and drug-induced erosions or ulcerations. Other underlying pathologies include malignant or benign small bowel neoplasms, namely stromal tumours, carcinoids, lymphomas, adenocarcinomas, lymphomas, Meckel's diverticula – associated ulceration, infections and inflammatory bowel diseases [1].

Lipomas are the third most common benign tumor of the small intestine bearing little or no malignant potential [2]. Accounting for 20-25% of gastrointestinal lipomas, they are submucosal tumours of mesenchymal origin and they usually occur in the distal small bowel. More than two thirds of lipomas remain asymptomatic and they may be found incidentally at surgery or autopsy. When a lipoma increases in size (larger than 4cm in diameter), it may cause colicky abdominal pain, intussusception and intestinal obstruction. When symptomatic, surgical resection is the method of treatment. Haemorrhage and anaemia manifested in the present case, are considered rare complications of lipomas [2,3].

A lipoma is manifested as a well defined, smooth-surfaced filling defect on small bowel-follow through and conventional enteroclysis. Occasionally, the mass may be pedunculated. Moreover, with bowel peristalsis or compression, the shape of the mass is changed and this is a characteristic finding strongly suggesting the diagnosis [2].

CE provides new insights into the small intestine pathology. It is strongly suggested when obscure GI bleeding is to
be investigated and endoscopy of both the upper and lower GI is negative. The value of CE has been well documented for superficial mucosal intestinal lesions, when findings in radiologic approach may be negative or equivocal [3,4]. In the present case it disclosed a tumour, but it was not able to characterize the lesion.

CT-E is an excellent imaging modality for small bowel evaluation that combines the advantages of conventional enteroclysis and of cross-sectional imaging [5]. Although CE is highly accurate in diagnosing a small bowel tumour manifested with iron deficiency anemia, CT-E is important for exact lesion localization, characterization by attenuation values and contrast enhancement pattern, assessment of intra- and extra-luminal tumour extent, and disclosure of associated abnormalities such as lymphadenopathy and distant metastases [5]. In the present case, lipoma was accurately diagnosed on CT-E due to the presence of characteristic negative attenuation values.

**Differential Diagnosis List:** Small bowel lipoma.

**Final Diagnosis:** Small bowel lipoma.

**References:**
**Figure 1**

**Description:** demonstrates a protruding to the lumen tumor, covered with normal mucosa with a superficial ulcer (arrow), at the distal jejunum. **Origin:**
Description: Gross specimen of the partially resected jejunum with the intraluminal lipoma. Origin:
**Figure 3**

**Description:** shows a well demarcated, solid, homogeneous intraluminal tumor (arrow) without any prestenotic dilatation. Tumor CT density values (-85HU) is consistent with fatty tissue. **Origin:**