Online Case Report

Acute abdomen secondary to a Meckel's lipoma

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Small bowel intussusception, presenting acutely in adults is an extremely rare event. We present an exceptional case, previously unreported in the English language, of a lipoma within a Meckel's diverticulum giving rise to this clinical scenario.

Key words: Ileo-colic – Intussusception – Meckel's – Diverticulum – Lipoma

A 28-year-old Asian man presented to casualty with a 24-h history of profuse, bright red, rectal bleeding, associated with colicky central abdominal pain, vomiting and diarrhoea. Over the preceding 12 months, he was troubled by intermittent, crampy, abdominal pains, but these were not associated with any other symptoms and had resolved spontaneously so he had not sought medical advice. There was no relevant, past medical, family or foreign travel history.

On examination, he was pale, sweaty, tachycardic, tachypnoeic and in obvious discomfort. An ovoid mass, measuring 10 cm in maximal diameter was palpable in the peri-umbilical region. There was mild general tenderness throughout the abdomen, but no clinical peritonism. Rectal examination confirmed the presence of fresh blood.

Routine haematological and biochemical tests revealed a normocytic anaemia with a haemoglobin of 7.5 g/dl, but all other parameters were normal. Plain radiographs of the chest and abdomen were unremarkable.

The patient was resuscitated, and an urgent CT scan of the abdomen was requested. This revealed a complex mass, consistent with the palpable lesion involving small bowel and proximal large bowel. Radiological features were suggestive of an ileo-colic intussusception, although no definite lead-point or causative pathology was identifiable (Fig. 1).

Figure 1 CT-scan of the abdomen demonstrating 'egg-in-cup' sign for intussusception.

In view of the clinical situation, the decision was made to perform an emergency laparotomy. Findings confirmed the presence of an intussuscepted enterocolic lesion. The intussusception was reduced by gentle manual traction, and this revealed a small jejunal lesion acting as a lead-point, which had travelled via the ileo-caecal valve into the ascending colon. A standard resection with primary anastomosis was performed to

Figure 2 Resected specimen showing Meckel's diverticulum with lipoma in tip.

remove the abnormal and intussuscepted region of small bowel. The patient made an uneventful recovery and was discharged home on postoperative day 5.

Pathological examination of the resected specimen revealed an inverted Meckel's diverticulum that contained a lipomatous lesion, measuring approximately 30 mm in diameter, arising from its tip (Fig. 2).

Discussion

Intussusception is the invagination of a proximal segment of bowel (intussusceptum) into an adjacent distal segment (intussusciens). Intussusception is normally regarded as a childhood entity, but it can occasionally occur in adults.¹

Unlike childhood intussusception where the aetiology is idiopathic in 95% of cases, causative pathology can be identified in up to 90% of adult cases.²

Symptoms of intussusception in the adult are usually protracted over weeks or months, and can typically include abdominal pain, nausea, vomiting, rectal bleeding, altered bowel habit or weight loss. The classical paediatric triad of acute abdominal pain, a palpable 'sausage-shaped' abdominal mass and 'redcurrant jelly' stools is rare; however, an acute-on-chronic presentation as with this case can arise, with impending bowel obstruction and ischaemia.

Radiological features visible on a CT scan; the classical 'bowel-in-bowel' or 'egg-in-cup' sign are diagnostic of this condition, and, occasionally, the underlying pathology may also be identifiable. Urgent operative intervention is usually recommended for these patients.

Intussusception involving small bowel is usually secondary to a benign pathology, including neoplasms, lymphoid hyperplasia, or adhesions. Although an inverted Meckel's diverticulum as a causative lesion has been reported,³⁻⁵ association with a lipoma as the lead-point is extremely rare, and has not previously been presented in an English language publication.⁶

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