Jejunojejunal intussusception in an adult

A 42-year-old female patient, presented with jejunojejunal intussusception.

Imaging Findings:

The 42-year-old female patient presented with several weeks of nausea, vomiting and intermittent colicky central abdominal pain. Relevant past medical history included an oesophagectomy, which had been performed, for squamous cell carcinoma. Subsequent nutrition had been provided by the insertion of a percutaneous jejunal feeding tube. The initial clinical examination was unremarkable. A CT scan demonstrated a long intussusception over 20 cm in length. The lead point was caused by the feeding tube (Fig. 1a, b). All small bowel wall layers enhanced and there was no radiological evidence of necrosis. After removal of the jejunal tube the intussusception persisted, which was confirmed by an ultrasound scan. At laparotomy, the jejunum was resected. The remainder of the small bowel was normal, and no evidence of mesenteric metastases was found.

Discussion:

Intussusception in adults is rare, and occurs when a proximal segment of the bowel (intussusceptum) telescopes into an adjacent distal segment (intussuscipiens). The classification can be defined by location (small bowel or colon) or aetiology (tumour-related, postoperative, miscellaneous or idiopathic). In contrast to children, a demonstrable cause is present in over 80% of adult cases. Furthermore, unlike the acute presentation and examination findings of intussusception in children, the symptoms in adults can be acute, chronic or intermittent. The results of a clinical examination are often unremarkable. Intussusception arises in the small bowel in a half to two-thirds of the cases. The aetiology of small bowel intussusception differs from that of the colonic. Most notably, the occurrence of small bowel intussusceptions are likely to be due to benign lesions. Recognised causes include benign neoplasms (lipoma, haemangioma), Meckel’s diverticulum, Henoch-Schönlein purpura and bowel conditions associated with AIDS. Postoperative causative factors encompass adhesions, previous jejunostomy sites and long intestinal tubes acting as the lead point. Only about 15% of small bowel intussusception can be attributed to malignant lesions. Most frequently it is metastatic disease, as opposed to primary malignant lesions, causing the intussusception. Melanoma is the commonest metastasis identified. Management of small bowel intussusception is influenced by the demonstration, or not, of a lead point. Transient small bowel intussusception is a recognised entity that does not require surgical management. The underlying aetiologies include coeliac disease, malabsorption syndromes and Crohn’s disease. Dysrhythmic contractions have been proposed as a mechanism, hence the observation of an increased occurrence in the proximal small bowel where peristaltic activity is higher. Various imaging modalities have been used to demonstrate intussusception. Plain abdominal radiographs may show non-specific findings such as small bowel obstruction or the presence of a soft tissue mass. An ultrasound scan can be helpful, and show the presence of a sausage-shaped mass in the longitudinal plane or a target mass when seen...
transversely. The CT features of intussusception are well described and are often diagnostic, as the appearances are virtually pathognomic. These features include an apparent mass lesion consisting of bowel (intussusceptum) telescoping into the intussuscipiens. An eccentric low attenuation fatty area represents the intussuscepted mesenteric fat (Fig. 1c, d). Like on the ultrasound scan, these appearances vary, depending on the plane of imaging. Other features include a rim of contrast material or air bubbles encircling the intussusceptum. Features of small bowel intussusception vary, dependent on the cause. An intussusception with a non-neoplastic aetiology is more likely to be shorter in length, smaller in diameter and less likely to be associated with obstruction than an intussusception caused by a neoplastic process.

**Differential Diagnosis List:** Jejunojejunal intussusception secondary to the insertion of a percutaneous jejunal feeding tube.

**Final Diagnosis:** Jejunojejunal intussusception secondary to the insertion of a percutaneous jejunal feeding tube.

**References:**

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Figure 1

a

Description: A CT image showing a percutaneous jejunal feeding tube at the start of a long intussusception. Origin:

b

Description: A CT image showing a percutaneous jejunal feeding tube lying within a thickened loop of the jejunum. Normal bowel wall enhancement is seen. Origin:
Description: A CT image showing the feeding tube and the jejunum appearing as a mass-like lesion.
Origin:

d
Description: A CT image showing a thickened jejunum and a characteristic appearance of intussuscepted mesenteric fat. Origin: