

Small bowel intussusception induced by a jejunal gastrointestinal stromal cell tumor diagnosed by endoscopic ultrasound

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A 48-year-old female was complaining of attacks of upper abdominal colicky lasting for about 2–6 h. The pain was recurring every 2–3 weeks for 2 months.

Abdominal computed tomography (CT) showed a solid mass with an area of cystic breakdown encroaching upon the body of the pancreas interpreted as a pancreatic lesion.

Upon EUS examination, an extraluminal bowel mass with typical doughnut appearance of intussusception was seen [Figures 1 and 2]. In another plane of examination, we noticed a bowel mass about 2 cm × 3 cm [Figure 3].

Surgical exploration was recommended and revealed jejunoduodenal intussusception with the presence of proximal jejunal mass [Figure 4] which proved to be a Gastrointestinal stromal tumor (GIST) upon histopathological examination.

DISCUSSION

Bowel intussusception in adults is considered a rare condition, accounting for 5% of all cases of intussusceptions and almost 1%–5% of cases with bowel obstruction. GISTs are rare clinical entities,

constituting <3% of all gastrointestinal malignant neoplasms and represent only 20% of small-bowel malignant neoplasms (excluding lymphoma).^[1]

Intussusception is correctly diagnosed preoperatively in only one-third of cases.^[2] In transverse section, ultrasound shows concentric rings of tissue representing components of the bowel wall and mesenteric fat referred to as the doughnut or target sign.

In our case, CT could see the bowel GIST as a mass encroaching upon the body of the pancreas, but the intussusception was not identified. Jejunal intussusception was diagnosed by EUS by the typical doughnut appearance.

After a review of the literature, we did not find any case of small-bowel intussusception diagnosed by EUS. There is one similar report, published in GIE in 2010 by Kularatna *et al.* and his group. They described a case of jejunal GIST properly diagnosed by EUS after being

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Figure 1. Doughnut appearance of intussusception



Figure 2. Doughnut appearance of intussusception



Figure 3. Jejunal GIST with intussusception

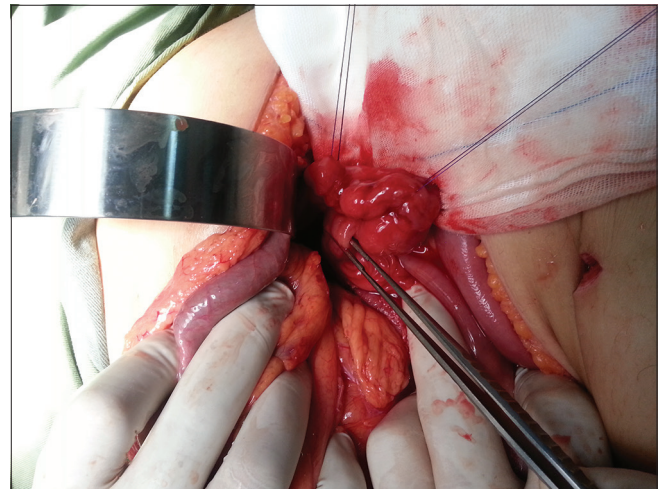


Figure 4. Jejunal GIST with intussusception during surgical exploration

mistaken for a pancreatic mass on CT;^[3] however, it was not associated with intussusception. To the best of our knowledge, it is the first case of intussusception initiated by a jejunal GIST diagnosed during EUS examination.

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Conflicts of interest
There are no conflicts of interest.

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