Unusual presentation of more common disease/injury

Simultaneous occurrence of jejuno-jejunal and ileo-ileal intussusception in a child: a rare occurrence

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Summary

Intussusception is the most common cause of intestinal obstruction in infants and children. This condition is frequent in children and presents with the classic triad of cramping abdominal pain, bloody diarrhoea and a palpable tender mass. Small bowel intussusceptions are much less common, with jejuno-ileal and duodeno-jejunal intussusceptions being the rarest types of all. Multiple simultaneous intussusception is a peculiar variety of intussusception. The authors report the simultaneous occurrence of jejuno-jejunal and ileo-ileal intussusception in a patient. As this is an extremely uncommon entity, it is being reported with a brief review of the relevant literature.

BACKGROUND

Intussusception of the bowel is defined as the telescoping of a proximal segment of the gastrointestinal tract within the lumen of the adjacent segment. Multiple simultaneous intussusceptions are a peculiar variety of intussusception characterised by more than one intussusception.¹ The most common type of intussusception is ileocolic. Jejuno-jejunal and ileo-ileal types of intussusception are rare.² We present a simultaneous jejuno-jejunal and ileo-ileal intussusception, a condition that has not been reported previously.

CASE PRESENTATION

A 10-year-old boy presented to the department with a complaint of pain in abdomen and no passage of flatus and feces for last 8 days, along with vomiting for last 3 days. On examination, the patient was dehydrated. His pulse rate was 98/min; respiratory rate was 20/min. On examination of the abdomen, there was a lump in the umbilical and the left lumbar segment. Per rectal examination was non-informative. A diagnosis of intussusception was suspected.

INVESTIGATIONS

X-ray abdomen erect view revealed few air–fluid levels.

TREATMENT

After resuscitation of the patient, he was planned for an emergency laparotomy. On exploration of the abdomen, we noticed a large jejuno-jejunal intussusception which was about 10 cm from the duodenojejunal junction. The intussusciens was ruptured and the gangrenous intussusceptum was coming out through it. On further exploration of the bowel, we noticed an ileo-ileal intussusception which was about 10 cm from the ileo-cecal junction (figure 1). The ileo-ileal intussusception was successfully reduced manually. After its reduction, we noticed an ileal polyp which was acting as a pathologic lead point. As the jejuno-jejunal intussusception had developed gangrene, the devitalised bowel was resected along with the grossly dilated and perforated part of the intussusciens. It was followed by

jejuno-jejunal anastomosis. The ileal polyp was removed by the enterotomy.

OUTCOME AND FOLLOW-UP

The postoperative period was uneventful. The patient was allowed oral diet on the fifth postoperative day. He was discharged in a satisfactory condition on 10th postoperative day. The histopathology of the polyp revealed it to be a juvenile one.

DISCUSSION

Intussusception is the most common cause of intestinal obstruction in children between 3 months and 6 years.³ The patients may present with a wide range of non-specific symptoms, with less than one-fourth presenting with the classic triad of vomiting, abdominal pain and bloody stools.³

Small bowel intussusception (SBI) is unusual, representing 1–10% of all intussusceptions but up to 50% of cases in older children.⁴ Various types of SBI are ileo-ileal, jejuno-jejunal, jejuno-ileal and duodeno-jejunal in descending order of frequency. SBI typically presents in a subacute manner and, hence, delayed diagnosis can result in an increased risk of ischaemic complications.⁴

SBI present with a lump in the left abdomen or paraumbilical region,⁴ which was also noticed in our patient. Though we agree that ultrasonography is the first choice of investigation to diagnose intussusception,² we did not go for it as the obstruction in our patient was present for 8 days and there was fear of bowel gangrene. In such condition, we believe that emergency laparotomy was needed.

There have been previous reports mentioning multiple intussusceptions in a patient^{1 5} but none has reported simultaneous occurrence of the jejuno-jejunal and ileo-ileal intussusceptions.

Our case is peculiar, as simultaneous jejuno-jejunal and ileo-ileal intussusception has not been reported previously. Moreover, SBI itself is not so common.

Figure 1 Peroperative view showing both the intussusceptions. Jejuno-jejunal intussusception is marked by the bold arrow. Perforated bowel is obvious. Ileo-ileal intussusception is marked by the narrow arrow.

Learning points

- ▶ SBI is an uncommon entity which may present in an unusual way; hence, the operating surgeon must be ready to encounter any type of unusual presentation.
- ▶ If managed carefully, the results are excellent.
- ▶ SBI can not be reduced by contrast enema.

Competing interests None.

Patient consent Obtained.

REFERENCES

1. **Singh JK**, Bawa M, Kanojia RP, *et al*. Idiopathic simultaneous intussusceptions in a neonate. *Pediatr Surg Int* 2009;**25**:445–7.
2. **Ein SH**, Daneman A. Intussusception. In: Grosfeld JL, O'Neill JA Jr, Fonkalsrud EW, Coran AG, eds. *Pediatric Surgery*, Sixth edition. Philadelphia PA: Mosby Elsevier 2006:1313–1342.
3. **Waseem M**, Rosenberg HK. Intussusception. *Pediatr Emerg Care* 2008;**24**:793–800.
4. **Smyth R**, McCallion WA, Paterson A. Total jejunoileal intussusception: a case report and literature review. *Ulster Med J* 2009;**78**:10–12.
5. **Syrimi M**, Courtney ED, Mills AD, *et al*. Large caecal intussusception associated with three jejunal intussusceptions in a child with cystic fibrosis. *Int J Colorectal Dis* 2008;**23**:1141–2.

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Please cite this article as follows (you will need to access the article online to obtain the date of publication).

Pandey A, Rawat JD, Wakhlu A, Kureel SN, Gopal SC. Simultaneous occurrence of jejuno-jejunal and ileo-ileal intussusception in a child: a rare occurrence. *BMJ Case Reports* 2010;10.1136/bcr.08.2010.3294, date of publication

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