

CASE REPORT

A Boy With a Recurrent Intussusception Within 48 Hours – A Vague Hint Not to Be Missed in Primary Care

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ABSTRACT

Intussusception is the most common paediatric abdominal emergency in young children. Even though red current jelly stool is the pathognomonic feature, it only presents in less than 15% of cases. The clinical diagnosis is often missed as the presentation can mimics others. A recurrent case within 48 hours of reduction is even rare and can be falsely suspected as a normal post-reductive presentation. We highlighted a recurrence of intussusception in a 3-year-old boy, who was initially well after being discharged to home. Medical attention was sought initially but was informed that the clinical presentation could be resolved in a few days. Nevertheless, a second opinion has been sought in view of the persistent frequency pattern. Without delay, readmission of the child was arranged for surgical reduction. Regardless of the mild severity of gastrointestinal symptoms, the possibility of recurrence of intussusception should be suspected despite the presumed success of the initial intervention.

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is reported that recurrence can occur after any reduction process in up to 10% of cases, but usually the symptoms are typically presented (1,2). We highlighted a recurrent case of intussusception in a 3-year-old boy, who was initially well after being discharged to home. The case caused an initial dilemma in the diagnosis.

INTRODUCTION

Intussusception is the most common abdominal emergency in young children, involving invagination of the intestinal part into itself (1,2). In Malaysia, children under one year old and children aged 1 to 5 years old had intussusception incidence rates of 17.8 and 4.8 per 100,000 person-years, respectively (1,2). The peak incidence is between four and 36 months of age (1,3), which can be due to underlying viral infections. However, most cases are idiopathic. Even though red current jelly stool is one of the pathognomonic features, it only presents in less than 15% of cases (1,2). Other symptoms that may suggest intussusception include intermittent, severe, crampy abdominal pain alternating with a pain-free period in which the child could be active as usual (1-3). The other symptoms could be nausea, vomiting, diarrhea, reduced appetite, and lethargy (1-3). Therefore, the clinical diagnosis is often missed as its early presentation can mimic other more common, non-urgent cases such as viral gastroenteritis (1-3). A recurrent case within 48 hours of reduction intervention is even rare and can be falsely suspected as a normal presentation in the post-procedure sequelae. It

CASE REPORT

A 3-year-old boy was presented with isolated mild lower abdominal pain for six hours. Each episode lasted for less than a minute and was resolved on its own. Otherwise, the child was ambulating well, tolerating orally, and able to pass bowel and flatus as usual. He had no other associated symptoms such as fever, vomiting, or crying on micturition.

Three days prior to the clinical presentation, the child was admitted to a hospital with symptoms of severe abdominal pain for a duration of two days. The pain was associated with recurrent vomiting and an inability to tolerate orally. Initially, the child was admitted with an impression of a viral infection before a diagnosis of intussusception was made based on an abdominal ultrasound after his symptoms worsened during admission. A hydrostatic reduction of the colon was then conducted in view of the presence of ileocolic intussusception. Furthermore, he was relatively stable without other systemic complications. He was discharged about 48 hours prior to the onset of the new

clinical presentation.

During his current clinical presentation, medical attention was sought, but he and his parents were informed that it could be a usual post-operative symptom, which should be resolved in a few days. Nevertheless, his mother sought a second opinion in view of the persistent frequency and pattern of abdominal pain. Without delay, readmission of the child was arranged for suspected recurrence of intussusception despite the non-specific clinical presentation. The child benefited from a high clinical suspicion and was referred to the surgical team for a subsequent successful surgical reduction. Surgical reduction was indicated as the previous non-operative procedure was considered incompletely successful by the managing team. The boy was then discharged well without any recurrent symptoms.

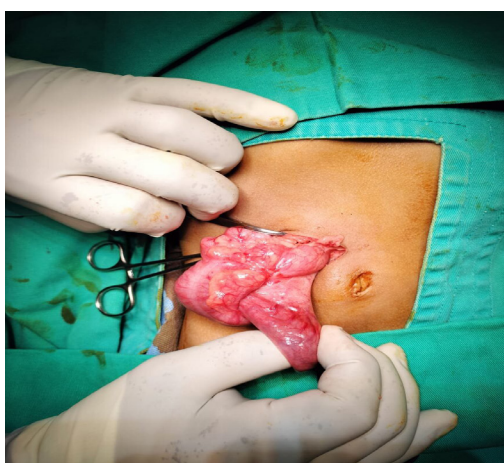


Figure 1: Ileo-ileal intussusception. The intussuscepted ileum is swollen and inflamed, signifying its underlying obstruction.

DISCUSSION

Intussusception is an acute surgical emergency in the pediatric age group that needs to be intervened urgently either through non-invasive hydrostatic or air reduction or even open reduction surgery (1,2). The condition can be suspected clinically in the majority of cases and requires bedside ultrasound for supportive evidence (1–3). However, some patients may not present with typical features and, therefore, might cause a delay in management (2,). Nevertheless, it is reported that children with intussusception can just present with persistent abdominal pain without other concomitant symptoms (1,2).

In our case, the child's mother had sought medical attention multiple times before an accurate diagnosis could be made. The child was managed non-surgically with hydrostatic reduction for his ileocolic intussusception, and his condition was reported to be improving well with a successful outcome. The dilemma arose when the child subsequently presented with intermittent abdominal pain, which can be a spectrum

of post-intervention, non-specific abdominal pain. A repeated abdominal X-ray was not helpful as the previous fluoroscopic procedure had left white opacification on the bowel internal wall, which could lead to a wrong interpretation (4).

Therefore, the only clue that was present was the boy's unresolved intermittent pain with a similar trend in frequency (2,3). It was a signal that the underlying inflammation was ongoing and not getting better. In this case, the boy's mother noticed the persistent trend and, therefore, decided to ask for a second opinion. Usually, post-intussusception abdominal pain manifests as resolving in trend, and the interval would have become less frequent with time (3). The immediate action by the boy's mother should be praised and highlighted. Besides that, an ultrasound was valid to be done in this case, and urgent admission was indeed required, which had been requested by the mother since the beginning. It was indeed clinically warranted. Other than that, another important aspect, which is the psychological burden, should also be considered in this situation (5). Recurrent admission does not only cause distress to the patient but also to the parents and caretaker (5). If the diagnosis and early management had been conducted earlier, the clinical and psychological outcomes would have been better.

There are various possible associations for the failure of hydrostatic reduction of intussusception in paediatric patients, including the presence of a pathological leading point, delayed presentation, or concomitant abdominal distension (1-3). However, in this case, postoperative findings do not reveal any presence of extensive bowel inflammation, oedema, intraluminal mass or lesion such as polyp, cyst, lymphoma, or diverticulum. The child also presented with isolated abdominal pain without any significant mass or distension. The only possible factor that can be related is the duration of symptoms in the first presentation, which has already reached 48 hours. Even though non-operative reduction can be repeated, surgical intervention is chosen after considering parental anxiety and preferences.

CONCLUSION

Regardless of the mild severity of gastrointestinal symptoms, the possibility of recurrence of intussusception should be suspected despite the presumed success of the initial intervention. Each carer should be given safety nets to bring the child back to the treating team in any suspicious case. Primary care providers should emphasize the importance of immediate follow-up with the patient if the symptoms persist, worsen, or are in any condition to confirm the diagnosis. Parents' decision to seek medical attention should be praised as this could be the only hidden clue that the child is not well and

should be entertained by the treating doctor.

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