C A S E   R E P O R T

Laparoscopic treatment of idiopathic jejuno-jejunal intussusception in an adult

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Abstract

Here we present the case of a 29-year-old female patient who underwent to laparoscopic reduction of idiopathic jejuno-jejunal intussusception, a very rare cause of intestinal obstruction in adults. Laparoscopic exploration represents the best approach in adults. Unfortunately, manoeuvres of laparoscopic reduction are difficult and conversion to laparotomy is often needed.

INTRODUCTION

Idiopathic intestinal intussusception represents a very rare entity in adults: about 90% of adult intussusception is due to a pathologic lesion in the bowel wall [1–3]. The optimal management strategy for adult intussusception remains controversial and the majority of the adult patients undergo to laparoscopic exploration; unfortunately, conversion to laparotomy in often needed to reduce the intussusception.

Here we describe the case of a 29-year-old female patient who underwent to laparoscopic reduction of idiopathic jejuno-jejunal intussusception.

CASE REPORT

In May 2020, a 29-year-old female patient reached the Emergency Division of our Hospital with severe pain in the upper of the abdomen, vomiting and constipation.

Her clinical history was not significant (appendectomy in youth and a recent pregnancy).

At hospitalization, the abdomen was very painful, mostly in the upper abdominal quadrants, where early signs of peritoneal irritation and hyperperistalsis with high-pitched tinkling were noted.

Laboratory analyses demonstrated increased inflammatory markers (neutrophilic leukocytes, polymerase chain reaction). Abdominal X-rays and computed tomography were not relevant.

Consequently to the severe abdominal pain not responsive to analgesics, the patient underwent to urgent explorative laparoscopy which revealed a jejuno-jejunal intussusception at the level of the second jejunal loop (Fig. 1). The intussusception was reduced. The exploration of the entire small bowel showed no underlying pathology that could have triggered the intussusception. No further surgical manoeuvres were done.

The patient had an uneventful clinical course and was discharged 4 days after the operation in good conditions.

The subsequent capsule endoscopy confirmed the absence of pathologies of the patient’s entire small bowel.

DISCUSSION

Intestinal intussusception represents a very rare cause of intestinal obstruction in adults (<5% of all intestinal obstructions) [1]. In contrast to childhood intussusception (idiopathic in 90% of cases), about 90% of adult intussusception is due to a pathologic lesion, or lead point, in the bowel wall [1–3]. The peristalsis along
bowel intussusception promotes extension of the invagination, with consequent involvement of longer segments of the intestine [2]. In accordance to the site of the lead point, the intussusception is defined as enteric (jejuno-jejunal, jejuno-ileal, ileo-ileal, ileocolic and ileocecal) or colonic (colocolonic and colorectal) [2]. The pathological cause of intussusception is represented by benign lesions in the majority of enteric intussusception, whereas a malignant process is found in the majority of colonic intussusception [3]. The optimal management strategy for adult intussusception remains controversial. Whereas in childhood the treatment is often ‘non-surgical’, the majority of the adult patients undergo to surgical exploration, preferably laparoscopic [3]. Based on the cause of intussusception, the surgical approach can be represented by reduction of the invagination (in the absence of wall ischemia or underlying lesions) or bowel resection (in case of ischemia or presence of a lesion that may have triggered the intussusception) [1].

In our case, we performed a laparoscopic reduction of the healthy small bowel without underlying pathology (idiopathic intussusception) prevented the need for a bowel resection.

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