

Postpartum Acute Intestinal Intussusception: A Case Report with Literature Review of a “Pediatric Pathology in an Adult”

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ABSTRACT

Introduction: Intestinal intussusception is defined as the penetration of a proximal segment of the intestine into a distal segment, leading to intestinal obstruction. It is a common cause of small bowel obstruction in children. This pathology is rare in adults and represents only 1% of all cases of intestinal obstruction. We report a case of ileo-ileal intestinal intussusception in a 26-years-old adult woman, complicating postpartum eclampsia.

Case Presentation: This was a 26-years patient being treated for eclampsia associated with HELLP syndrome and complicated with acute kidney injury. The diagnosis of intussusception was made based on a clinical bowel obstruction syndrome and confirmed with ultrasounography. The management consisted of laparotomy with surgical resection of the invaginated bowel segment.

Conclusion: Intestinal intussusception is mainly a childhood pathology which may exceptionally occur in adults. The degree of bowel and hence abdominal distension caused by intestinal obstruction justifies surgical exploration, with subsequent resection of invaginated segment as a therapeutic intervention.

Keywords

Abdominal pain, Intussusception, Intestinal obstruction, Postpartum.

Introduction

Acute intestinal intussusception is a frequent paediatric pathology. It occurs because of the penetration of a proximal segment of the intestine into a distal segment with intestinal occlusion and ischemia. It is a surgical emergency of the digestive system in infants, requiring immediate intervention to restore the feeding process, which is indispensable for thriving [1-10]. However, this condition is rare in adults, accounting for only 1% of all cases of intestinal obstructions [1]. The main causes of intestinal intussusception are inflammatory diseases, benign or malignant tumours, malformations and bowel motility disorders often associated with an organic mass [1,11-17]. However, it represents

6% of the causes of digestive obstruction during pregnancy [18]. We report a case of intestinal intussusception in a 26-years female patient complicating postpartum eclampsia.

Case Presentation

This is the case of a 26-years-old woman, single, homemaker with a history of eclampsia associated with HELLP (Hemolysis, Elevated Liver Enzymes, Low Platelets) syndrome and complicated with acute kidney injury at 40 weeks of gestational age. These events occurring after a well-monitored pregnancy with a blood pressure by the 38th week of pregnancy at 100/60 mmHg. The onset and persistence of an altered state of consciousness after the expulsion of a freshly born baby motivated the patient’s transfer to the intensive care unit. On the 5th day of hospitalization, she presented with vomiting of great abundance, abdominal distension without passing stool nor gas. The abdomino-pelvic ultrasound revealed



Figure 1: Abdomino-pelvic ultrasound.

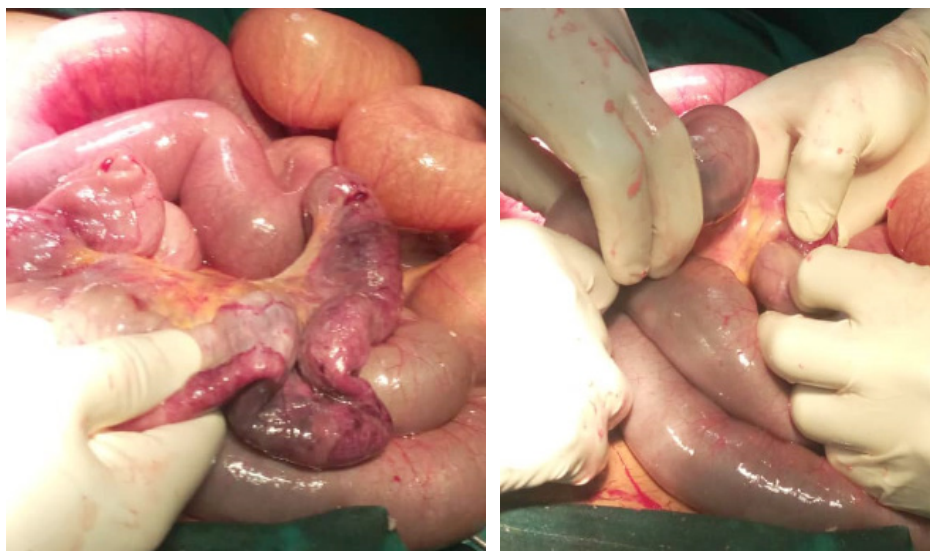


Figure 2: Ileo-ileal intussusception.

a right flank invagination, a large uterus with heterogeneous contents of both blood clots and trophoblastic debris associated with air bubbles as shown in figure 1.

The spot diagnosis was acute intestinal intussusception complicating eclampsia associated with HELLP syndrome and acute kidney injury. An emergency laparotomy was performed and the intraoperative finding was ileo-ileal intestinal intussusception as shown in Figure 2.

A manual disinvagination covering a 10cm portion of necrotic terminal ileum was performed, followed by segment resection and terminal ileo-ileal anastomosis. The procedure was well tolerated by the patient. The evolution was marked by recovery of consciousness and appearance of aphasia. However, the cerebral CT scan was without abnormalities and the aphasia spontaneously resolved. The patient was discharged after day 27 post-operative and 32 days of hospitalization.

Discussion

We reported a case of intestinal intussusception in an adult. A pathology, which is more frequent in children, being idiopathic in 90% of cases. In adults, an aetiology is found in 70-90% of cases [1]. However, no aetiology was identified in our patient. Just as in children, intestinal intussusception gives rise to bowel obstructive syndrome in adults and constitutes a surgical emergency [18,19]. As a matter of facts, intestinal intussusception accounts for 1% of symptomatic intestinal obstructions in adults, with colo-colic presentation accounting for 17% of all intestinal obstructions. Ileo-ileal presentations as was found in our patient are quite rare [20]. In effect, the most common presentation found in pregnancy is ileo-colic [18].

In terms of clinical presentation, intestinal intussusception is generally nonspecific in adults. Pain is by far the most common symptom as it is present in 71-90% of patients. Following pain, other signs and symptoms such as rectal bleeding and vomiting are

frequent as well [21]. In our patient, the symptoms were typical of those observed with intestinal obstruction, including absence of stool and gas passing for more than 24 hours, followed by vomiting of great abundance, and abdominal distension.

An accurate diagnosis is based on a good medical history, a thorough physical examination and specific imaging modalities, such as X-ray, ultrasound (US), computed tomography (CT), magnetic resonance imaging (MRI), enterocolysis, endoscopic procedures, angiography or even capsule endoscopy [22]. However, there is a real diagnostic and therapeutic challenge, which is both gynaecological and surgical [23,24].

As far as the therapeutics is concerned, surgical management seems to be the rule and resection without reduction is the preferred modality in intestinal invaginations [22]. Moreover, surgical intervention traditionally allows a selective resection, depending on the size of the tumour, the duration of the intussusception and the amount of inflammation.

On the other hand, women with such complex conditions in perinatal always require keen and adapted follow-up during the postpartum period to prevent complications [25-30].

Conclusion

Acute intestinal intussusception is rare in adults. Abdominal distension is an important sign that may be difficult to observe and recognize in the perinatal period. Nevertheless, the degree of distension caused by intestinal obstruction may determine the need for surgical intervention, which is the mainstay of the treatment.

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