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Case Report

Transanal Protrusion of Colo-Colic Intussusception with Incarceration of Ileum: A Case Report

Protrusion Transanale d'une Intussusception Colo-Colique avec Incarcération de l'Iléon : À Propos d'un Cas

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ABSTRACT

The prolapse of intussusceptum through the anus is a complication of acute intussusception. We report a case associated with incarceration of ileum through the anus, in a 07-month-old infant. This was a 7-month-old male infant, referred by a level 2 health center for exteriorization of loops at the anus. The clinical examination and abdominal ultrasound. concluded with acute intussusception prolapsed through the anus. The intraoperative diagnosis was transanal protrusion of colo-colic intussusception with incarceration of a segment of the ileum. We realized a desincarceration of the exteriorized ileum, a manual reduction of the intussusception and the section of the band. The postoperative course was uneventful. Delayed diagnosis remains the main factor contributing to intussusception prolapse in Africa where intussusception is often confused with intestinal amoebiasis. Caregivers should be aware of the importance of performing an abdominal ultrasound in the event of any dysenteric syndrome. Surgical treatment is recommended.

RÉSUMÉ

Le prolapsus de l'invagination par l'anus est une complication de l'invagination intestinale aiguë. Nous rapportons un cas associé à une incarcération de l'iléon dans l'anus, chez un nourrisson de 07 mois. Il s'agissait d'un nourrisson de sexe masculin de 7 mois, adressé par un centre de santé de niveau 2 pour extériorisation d'anses au niveau de l'anus. L'examen clinique et l'échographie abdominale ont conclu à une invagination aiguë prolabée par l'anus. Le diagnostic peropératoire était une protrusion transanale d'une invagination colo-colique avec incarcération d'un segment d'iléon. Nous avons réalisé une désincarcération de l'iléon extériorisé, une réduction manuelle de l'invagination et la section de la bride. Les suites opératoires ont été simples. Le retard diagnostique reste le principal facteur favorisant le prolapsus de l'invagination en Afrique où cette affection est souvent confondue avec l'amibiase intestinale. L'attention des soignants doit être attirée sur l'importance de réaliser une échographie abdominale en cas de syndrome dysentérique. Le traitement chirurgical est recommandé.

INTRODUCTION

Transanal protrusion of intussuception is the penetration of a portion of intestinal segment into the segment adjacent to it with exteriorization of the head of intussusceptum through the anu. It is a serious digestive condition [1] whose diagnosis is based on the Ombredanne triad and abdominal ultrasound. Prognosis depends on the early management [1,2]. The intussusceptum, made of the intestinal loop that penetrates and the one that receives, can in some cases penetrate into the underlying intestinal loop, thus creating a double compound acute intestinal intussusception [3,4]. Acute intussusception is characterized in Africa by a delayed diagnosis with risk of prolapse of the head of the intussusceptum [1,2,5] and intestinal perforation [4]. We did not found a case of ileum penetration and incarceration into a prolapsed intussusceptum. We describe prolapsed colocolique intussusception with incarceration of ileum through anus in a 7-month-old infant.

CASE PRESENTATION

This was a 07 months old male infant referred by a level 2 health center for an externalization of the bowel through the anus. The onset of symptomatology would be five (05) days before admission by constant crying and screaming, refusal to breastfeed and fever. The parents would have consulted a health center where an anti-malarial treatment would have been prescribed. Given the appearance of abdominal distension, and an emission of bloody-mucous stools, the diagnosis of dysentery had been suggested and a treatment based on metronidazole instituted. Four days later, appeared an externalization of an intestinal loop through the anus. In his medical history we noticed a poor pregnancy follow-up, a full term birth with a weight of 3600g, good development. The vaccination was up to date for his age. He had received a dose of rotavirus vaccine 01 months before symptomatology. At physical examination the infant had a poor general condition, palor, temperature was 38°5 Celsius, pulse rate110 beats/min, breathing rate25 cycles/min and weight 6,5 kg. The abdomen was slightly distended, tender, without abdominal defence or palpable mass. An externalization of a segment of ileum through anus was noted (figure 1).

Figure 1: Trans anal protrusion of a segment of ileum

At rectal examination, finger could be insinuated between protruding mass and rectal wall. suggesting intussusception prolapsed through the anus. The diagnosis of intussusception was confirmed by abdominal ultrasound. After resuscitation, a transverse laparotomy was performed. The intraoperative findings indicated that the small bowel was intussuscepted into ileoileo and coecocolique intussuception. After desincarcération and complete reduction of the exteriorized, the bowel was purple (Figure 2), but viable.

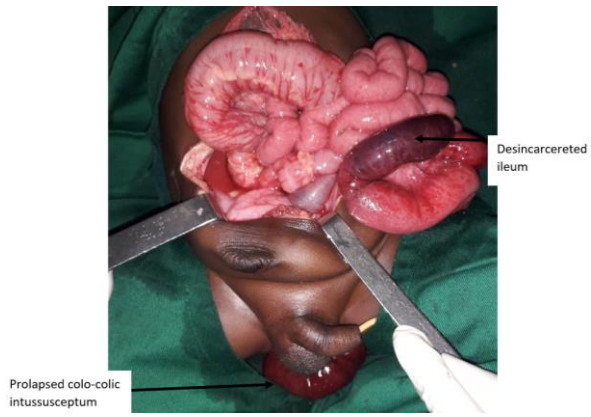

Figure 2 : intraoprative view with : the prolased colo-colic intussusception and the purple aspect of desincarcerated segment of ileum

We also noticed a colocolique prolapsed intussusception of the left colon. We performed a manual reduction of the intussusception. Cecum was in pelvic position, mobile with a band between the cecum and sigmoid. There was no colic tumour.). The band was resected. At 06 months, follow up was uneventful.

DISCUSSION

Intussusception with prolapse through the anus is rare. Its frequency varies between 1 and 2% in developed countries [6] while in developing countries variation reached 10 to 40% [1,2,5]. Several factors can explain the prolapse of the intussusceptum. On one hand, it may be anatomical factors such as the lack of alignment of the colon, the length of the root of the mesentery, intestinal malrotation [2,4,7] whose association with the intussusception leads to the Waugh syndrome [4,7]. On the other hand, the diagnostic delay allows progression and externalization of the intussusceptum to the anus [2,5] which could explain the higher frequency of prolase intussusceptum in Africa [1,2,5] This delay was observed in our patient where the diagnosis had been made 05 days after the appearance of the signs of the classic triad of Ombredanne. The delay could also explain the exteriorization and incarceration of ileum through the anus. This delay of diagnosis reflects the lack of knowledge of this cdition in our context where intussusception is often confused with an intestinal amoebiasis due mucous or bloody mucous stoolsIn case of Intussusception, The time to prolapse of the intussusceptum into the anus varies between 8 and 14 days [2,5,6]. We observed a shorter delay (5 days). Praveen and all described a case of prolabed ileo-caeco-coo-colic intussusception associated with malrotation of the intestine in a 4-day-old newborn [4]. With or without malrotation, intussusception usually occurs between the ages of 3 months and 3 years, but can occur at any age [7].

Acute prolapsed intussusception is often confused with rectal prolapse wich is a benign condition in children. The rectal examination allows differential diagnosis. Indeed, the existence of a free space between the anal canal and the rectal wall and the prolapsed mass, allows to affirm the diagnosis of a prolapsed intussusception

[2,8]. Cases of intussusception with prolapse of the intussusceptum through a persistent omphalo-mesenteric canal have been described [3,9]. Treatment of our patient was surgical as recommended in the literature for delayed diagnosis, prolased intussusception, contraindications to non-surgical treatment (poor general condition, signs of shock, peritoneal syndrome, presence of intestinal necrosis) [2,3,6], and in case of malrotation [6]. On the other hand, the non-surgical treatment would not have allowed the complete désincarceration and reduction of exteriorized ileum..

We did not observe intestinal necrosis despite the delay in diagnosis. It is uncommon in prolapsed intussusception despite the evolution over several days [6] unlike the double intussusception which has a double risk of intestinal necrosis [3] and intestinal perforation [4]. This rarity of necrosis would be explained by a fairly wide collar allowing the boudin to progress towards the anus without vascularization is understood.

CONCLUSION

Prolapse of the intussusceptum through the anus is a rare complication. A thorough rectal examination ensures that it is not confused with the rectal prolapse. Late diagnosis remains the main factor in Africa where intussusception is often confused with intestinal amoebiasis. In Level 1 and level 2 health centers, caregivers should be aware of the importance of performing an abdominal ultrasound in front of any dysenteriform syndrome in children to avoid the delay of diagnosis and avoid the risk of intussuseption prolase and bowel necrosis. The clinical form observed exposes to a double risk of intestinal necrosis. Surgical treatment is recommended.

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