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# **INTESTINAL INTUSSUSCEPTION IN ADULT - CASE REPORT**

Intussuscepção intestinal em adulto – relato de caso

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### INTRODUCTION

Intussusception in adults accounts for only 5% of all cases of intussusception and the cause rare (1% to 5%) of intestinal obstruction in adults. They are generally found between segments that move freely and retroperitoneal segments or fixed by adhesions. The location is classified into three main categories: 1) enterohepatic enteric, 2) lap-cholic, 3) ileo-colic.

In adults the clinical picture is quite variable and nonspecific, making diagnosis of this condition usually difficult and most often an intraoperative finding, as opposed to children who often have specific symptoms, abdominal pain, bloody stools and a palpable mass, dominating the clinical picture. Intussusception in children is primary or idiopathic in most patients and 80% are effectively treated by reducing or air enema. In adults due to the fact that most patients have some underlying disease process in the intestinal wall and the associated risk of malignancy in about 65%, there is consensus that resection is the appropriate in these patients. However, there is controversy regarding intussusception should be reduced before resection.

#### **CASE REPORT**

Woman of 53 years, previously healthy, with a history of diffuse abdominal pain for 48 hours, characterized with a colic pain of moderate intensity associated with the appearance of mass in the right iliac fossa from the onset. She also reported the absence of evacuation and elimination of flatus. Fever, nausea, vomiting or abdominal pain were not related. Physical examination showed vital signs within normal limits and

bulging abdomen with visible mesogastrium, pain upon deep and superficial palpation and signs of peritoneal irritation. Laboratory tests showed no leukocytosis or biochemical changes. Abdominal ultrasound showed an image of onion skin in cross section.

Laparotomy showed intussusception of the cecum into the ascending colon to the initial portion of the transverse colon. It was done right ileocolectomy with oncological principles, with primary anastomosis between ileum and transverse colon. The patient had hypertension postoperatively requiring high doses of antihypertensive drugs for blood pressure control. Evolved without other complications and was discharged on the 6<sup>th</sup> postoperative day.

The pathology of the surgical specimen showed a polypoid lesion with hemorrhagic aspect 7.0 x 4.0 cm in size. Adjacent to this lesion was also demonstrated intussusception of a segment of the same loop with edema. Cuts on polypoid lesion was yellowish, soft and smooth. On microscopy of the intestinal wall showed marked edema, micro-hemorrhages and leukocyte infiltration. In the region of the cecum was noted benign lesion composed of mature adipocytes, unilocular, without atypia, with areas of erosion of the epithelial lining with diagnostic impression of lipoma of the cecal wall and no malignancy.

### **DISCUSSION**

Most of the current series show that approximately 90% of patients have anatomical or pathological cause underlying the intussusception<sup>4,6,7,9,12</sup>. Concerning the location, the small intestine is the most common site of involvemen<sup>8,9,12</sup>, and lesions in distal segments are predominant<sup>12</sup>. Regarding the etiology, intussusceptions can be classified as benign, malignant or idiopathic. There seems to be a slight predominance of malignant causes in relation to benign, especially in colonic intussusceptions<sup>3,6,10,12</sup>. Begos et al.<sup>4</sup> did a review of eight series with 1048 patients. Sixty-four percent of the cases were intussusceptions in the small intestine, and 63% had a benign underlying cause, compared with 14% of malignant lesions. In the large intestine, 36% of malignant cases have been identified8. This condition is rare in adults, remains a diagnostic challenge for most surgeons, especially for presenting wide range of symptoms, chronic symptoms often predominate<sup>2,4,5,6,8,9</sup>. In all series abdominal pain was the most common symptom, followed by nonspecific symptoms with nausea, vomiting, constipation and fever. The classic triad, found in children, abdominal pain, bloody stools and a palpable mass is found in a minority of adult patients. In a study of 41 patients the triad was seen in only four cases<sup>4</sup>. Even with the evolution of noninvasive diagnostic procedures, intussusception in adults is rarely diagnosed preoperatively (32%)<sup>4</sup>. X-ray examinations of the abdomen is more requested and, although rarely, show signs suggestive of intussusception, can help define an obstruction and in some cases the location<sup>8</sup>.

Contrast examination of the upper gastrointestinal tract can be done and be useful in small bowel intussusceptions. The barium enema is useful in patients with colo-colic or ileo-colic suspected intussusception and the classic signs obtained by this examination are the "meniscus sign" 1,3,12.

Ultrasound images suggest intussusception with the target signal in the cross section and the pseudo kidney, in longitudinal. They may also be highlighted, as in this case, the various layers involved in the intestinal walls, producing a pattern multilamellar or "onion skin". In most series, the ultrasound does not show good accuracy<sup>7,9</sup>.

Computed tomography is considered most sensitive radiologic examination to confirm intussusception<sup>3,4,12</sup> and evaluates possible extension of tumor, if present<sup>12</sup>.

Colonoscopic examination is valuable in the evaluation of cases of acute and chronic intussusception, especially when symptoms suggest obstruction of the colon<sup>8</sup>. Can confirm the intussusception, the location and shows the underlying lesion when it exists. In cases of lipoma, colonoscopy findings include the typical "cushion sign" (depression of the mass by forcing the colonoscope against it) and leakage of fat during the biopsy.

In most adult patients the diagnosis is made during surgical exploration. In these cases resection is recommended<sup>1</sup>. On the other hand, the extent of resection and manipulation of the invaginated bowel during the reduction remains controversial<sup>8</sup>. Some authors suggest that resection should be performed without prior reduction for the following reasons: 1) possibility intraluminal spread of tumor or venous during the reduction; 2) risk of perforation and spread of microorganisms and tumor cells into the peritoneal cavity; 3) increased risk of complications after anastomosis made about manipulated intestinal

tissue, friable and edematous<sup>8,11</sup>. Therefore ileocolic intussusception, ileocecal and colorectal colic, especially in patients over 60 years is of high risk of malignancy as etiological fator; should be resected without prior reduction. The resection should respect the oncologic principles and is recommended primary anastomosis between healthy and viable tissues<sup>8,11,12</sup>. In cases where the diagnosis is made preoperatively and benign lesions are well established, can be tried reduction and a more limited resection.

## **CONCLUSION**

Due to the high incidence of malignant conditions as a cause of intussusceptions in adults, resection is necessary. The reduction may be attempted before resection, in cases of intussusception of the small intestine, when feasible, and no malignant condition is suspected.

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