Intestinal intussusception:

a presentation of Crohn's disease

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A 46-year-old female patient came to consultation complaining of about 4 days' abdominal pain associated with constipation. The symptoms had been recurrent for 4 months, with periods of improvement and worsening. In addition, anorexia and significant weight loss were present. There had been no change in stool shape. On physical examination, she referred pain upon deep palpation of right lower quadrant, with no pain upon sudden decompression. Admission laboratory tests showed iron deficiency anemia.

An abdominal ultrasound was performed and showed circumferential thickening of the cecum, ascending colon, and terminal ileum. The abdominal assessment was complemented with a computed tomography (CT) which, in addition to the findings described above, also demonstrated the presence of intussusception of the small intestine (Figures 1 and 2). Despite this finding, the patient normalized her intestinal bowel movement in the same day, suggesting a transient invagination.

Intestinal biopsies were performed and showed a chronic pathological ulcerated inflammation of the mucosa of the ileum and large intestine with cryptitis, findings associated with Crohn's disease. After the beginning of the treatment with prednisone, there was significant clinical improvement.

Approximately 5% of all intussusceptions occur in adults and account for 1% of intestinal obstructions. In this group, about 10% of all intussusceptions are primary and 80-90% are secondary to an underlying pathology. Approximately 65% of the latter are secondary to a benign lesion or malignant tumor, and 15-20% of cases are due to processes other than tumor growth. The increasing use of CT scan, especially with multiple detectors, for the evaluation of acute abdomen has led to an increased detection of transient intussusceptions with no underlying disease (1-3).

## Clin Biomed Res. 2014;34(1):88-89

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Figure 1A-C: Abdominal CT. A and B: telescoping of the ileum showing a "sausage-shaped" mass, which represents the longitudinal axis of the intussusception. C: transverse axis of the intussusception, also known as "target sign".

Although the association of Crohn's disease with intestinal intussusception is described in the literature, there seems to be no injury to the head of the invagination in this case: the intussusception secondary to a segment of the ileum with active inflammatory disease (ileitis) was rarely described. One of the theories

about this association is the dysrhythmic contractions secondary to the on-going inflammatory process of a thickened, inflamed segment of bowel wall (4).

In conclusion, we described a rare case of intestinal intussusception as the initial presentation of Crohn's disease in an adult patient.



**Figure 2:** Coronal reconstruction of abdominal CT showing the transverse axis ("target sign") of the intussusception.

## **REFERENCES**

- Gayer G, Zissin R, Apter S, Papa M, Hertz M. Pictorial review: adult intussusception - a CT diagnosis. Br J Radiol. 2002;75(890):185-90.
- Paskauskas S, Pavalkis D. Adult intussusception. In: Lule G, editor. Current concepts in colonic disorders.
- Rijeka: InTech; 2012. p. 47-64.
- Kim YH, Blake MA, Harisinghani MG, Archer-Arroyo K, Hahn PF, Pitman MB, et al. Adult intestinal intussusception: CT appearances and identification of a causative lead point. Radiographics. 2006;26(3):733-44.
- López-Tomassetti Fernández EM, Lorenzo Rocha N, Arteaga González I, Carrillo Pallarés A. Ileoileal intussusception as initial manifestation of Crohn's disease. Mcgill J Med. 2006;9(1):34-7.

Received: 04/01/2014 Accepted: 10/02/2014