

Adult colonic intussusception: a case report

Intussuscepção colônica em adulto: relato de caso

Marcelo Barros Weiss¹, Romeu Barradas de Menezes²

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ABSTRACT

Intussusception is the penetration of a digestive tract segment into an adjacent segment. It is rare in adults and difficult to diagnose. For adults it generally involves a precipitating factor. This paper describes an adult patient who entered the emergency department with acute surgical abdomen. Emergency laparotomy revealed colonic intussusception. The pathology confirmed a lipoma as the head of this intussusceptum.

Key words: Intussusception; Intestine, Large; Adult; Lipoma; Laparotomy.

RESUMO

Intussuscepção é a penetração de um segmento do tubo gastrintestinal (TGI) em direção ao segmento adjacente. É rara em adultos e de diagnóstico difícil. Possui na faixa etária adulta, em geral, um fator precipitante. Este trabalho relata paciente adulta que se apresentou à emergência cirúrgica com abdome agudo. Realizada laparotomia de emergência que evidenciou invaginação colônica. A patologia confirmou tratar-se de lipoma como cabeça do intussuscepto.

Palavras-chave: Intussuscepção; Intestino Grosso; Adulto; Lipoma; Laparotomia.

INTRODUCTION

The invagination or intestinal intussusception is common in children but rare in adults. Its rarity and clinical unspecificity delay its diagnosis and its complications with repercussions on treatment in adults and the elderly.

CASE DESCRIPTION

Female patient, 38 years old, sought the ER due to recurrent abdominal pain for two weeks, lack of stool elimination in recent days, decrease of flatus, and hemochezia episode on the day before the visit. She presented episodes of vomiting, nausea, hiporexia, and weight loss of 4 kg in two weeks, without fever. Sought the emergency room five times previously, being prescribed analgesia, which brought partial improvement. The abdomen was distended, diffusely painful on superficial palpation, with hydroaerial sounds, bloat, and paraumbilical palpable mass on the right. Presented the following hematological tests: hemoglobin at 12.4 g%; total leukocytes: 10 000/mm³; platelets: 382 000/mm³; creatinine: 0.6 mg%; urea: 21 mg%;

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Institution:
Medical School from UFJF
Juiz de Fora, MG – Brazil

Corresponding Author:
Romeo Barradas de Menezes
E-mail: romeubm@globo.com

sodium: 137 mEq/L; and potassium: 3.8 mEq/l. The urinalysis (abnormal elements, sedimentoscopy) was normal. Abdominal ultrasound visualized a loop inside an intestinal loop in the infraumbilical region that could be matching the intestinal invagination.

The patient underwent laparotomy, which identified a major head of invagination in transverse colon, near the hepatic angle. Right hemicolectomy was performed with lymph node emptying and primary terminal-lateral anastomosis (Figure 1).



Figure 1 - Head of invagination in the transverse colon.

She evolved without postoperative complications. The histopathological result showed a giant lipoma.

DISCUSSION

The intussusception is the entrance of a segment of the gastrointestinal tube (TGI) toward the adjacent segment, previously or subsequently.¹ It can be classified in relation to its symptoms in acute, less than four days; sub-acute, four to 14 days; and chronic, over 14

days. The anterograde invagination occurs when the intestinal proximal segment invaginates into the lumen of the distal segment; and the retrograde, when the distal segment invaginates into the proximal.¹

The invagination is rare in adults, making up 5% of cases of intussusception and 1% of the causes of intestinal obstruction.² It may involve any part of the TGI, being more frequent in the small intestine than in the colon.^{2,3} The average age of onset is 54.4 years old in adults, with small predominance in women (1.3:1).⁴

The exact mechanism that leads to invagination is still unknown, however, it is believed that any injury or irritating process within the intestinal lumen is able to trigger it.¹ It is estimated that 90% of intussusception in adults have an underlying cause.^{3,5} In the large intestine, most institutional studies show that malignant tumors comprise more than 50% of the causes of colon invagination.⁵ Other risk factors cited, in addition to malignant and benign tumors, are human immunodeficiency virus infection, inflammatory bowel disease, prior abdominal surgery, and liver transplantation.⁶

In this case, the head of invagination was a lipoma, a benign tumor composed of fatty cells adult type surrounded by a fibrous capsule.⁷ It has an incidence of 0.6% with a predominance in the fifth and sixth decades of life, being more prevalent in women.^{7,9} A total of 32 cases of colonic invaginations secondary to lipoma were reported between 1976 and 2001.¹⁰ It is considered the second most common benign tumor of the large intestine and is usually asymptomatic,⁸ sometimes evolving into symptomatic in 6.6% of cases.⁹ Only two out of 24 cases of intussusception observed during 22 years were caused by lipoma.⁸ There is no controversy that lipomas must be at least 2 cm to generate signs and symptoms, which can be: intussusception, bleeding, bowel obstruction, and abdominal pain^{7,9}, however, the literature is controversial about which of these occurs more frequently.⁸ Theoretically, lipomas can undergo sarcomatous degeneration and become malignant, but this is an extremely rare event.⁸

Symptoms of intestinal invagination are nonspecific, being more prevalent in patients with confirmed diagnosis of intussusception: abdominal pain (100%), nausea and vomiting (55.5%), hematochezia (50%), and palpable mass in the lower hemi-abdomen (11.1%).⁵

The non-specificity of signs and symptoms of invagination makes the preoperative diagnosis a challenge for surgeons. Most of the times the clinical symptoms of obstruction predominate, making the radiography the first requested exam, which shows

signs of intestinal obstruction and, eventually, its site.³ Although ultrasound is considered a very useful exam in the diagnosis of invagination, the exam with the most accuracy is computed tomography, which can reach 100%.³⁻¹¹ However, according to the clinical situation and conditions in the service, barium enema, colonoscopy, and flexible sigmoidoscopy can be used as diagnostic resources.³

Most of the reviews indicate the urgent or elective surgery as a choice in the intestinal invagination therapeutic management because of the risk of intestinal ischemia and malignant lesion as the cause of the process.¹² A conservative management, with follow up through imaging exams (ultrasonography and CT), is possible in patients without underlying lesions in the imaging exams and without clinical manifestations.³

It is important to mention that, because adult intussusception has an underlying malignant cause in most cases, the manual reduction may cause tumor dispersal and is not recommended, especially if there is involvement of the colon.¹² However, when there is preoperative diagnosis of benign lesion, the reduction can be performed enabling a smaller resection if no signs of ischemia in the intestinal wall is observed.¹¹

CONCLUSIONS

The intussusception is a rare event in adults, with difficult diagnosis because of its unspecific symptomatology. The surgeon must, therefore, be aware of this diagnostic possibility, in which the best imaging method is the computed tomography for its identification. The treatment requires resection of the involved segment without attempting to reduce colon lesions.

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