

Acute Intestinal Intussusception Revealing Intestinal B-Cell Lymphoma in Adults: A Case Report

Abdelouhab El Marouni*, Ahmed Zerhouni, Karam Aziz, Tarik Souiki, Imane Toughrai, Khalid Mazaz, Karim Ibn Majdoub Hassani

Visceral Surgery Service, Hassan II University Hospital, Faculty of Medicine and Pharmacy of Fez, Sidi Mohamed Ben Abdullah University, Fez, Morocco

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*Corresponding author: Abdelouhab El Marouni

Abstract

Case Report

Acute intussusception is an uncommon finding in adults. Specific features are of great importance in identifying the cause because of the wide spectrum of etiologies in adults. In over 85 % of cases, an organic disorder is involved. Intestinal B-cell lymphoma revealed by intestinal intussusception is very rare. We report the case of a 45-year-old patient admitted with intestinal occlusion to the Emergency Department at the University Hospital Hassan II, Fez, Morocco. Abdominal CT scan showed acute intestinal intussusception associated with incarcerated bowel loop with bowel wall thickening. Without signs of pain. Surgical resection was the treatment of choice, followed by anatomopathological examination of the surgical specimen which showed diffuse large B-cell lymphoma. After surgery, chemotherapy was indicated in order to improve the prognosis and to avoid a possible relapse.

Keywords: Acute intestinal Intussusception intestinal B-cell lymphoma, surgical resection.

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INTRODUCTION

Intestinal intussusception in adults is rare and often reveals (in more than 85% of cases) an organic lesion [1]. Its evolutionary mode is usually subacute or even chronic, spanning several weeks or even months. Acute forms, more rare, are often confined to intestinal intussusception, the treatment is surgical based on intestinal resection with however an open debate about whether or not a prior reduction of intussusception [1, 2]. We report a rare case of acute intestinal intussusception revealing digestive B-cell lymphoma in a 45-year-old woman admitted to the Emergency in an occlusion chart.

OBSERVATION

This is a 45-year-old patient with no significant pathological history, admitted to the emergency room, for persistent vomiting, without any other associated sign. The interrogation found the notion of acute paroxysmal acute attacks without triggering factors, aggravated two weeks later, by the occurrence of a subocclusive syndrome. Moreover, there is no digestive hemorrhage or fever. The physical examination showed a slightly distended abdomen, flexible, without palpable mass. The rest of the somatic examination was without peculiarities were without

abnormalities. A radiological image of the abdomen without preparation showed hydroelectrolytic levels of the intestinal type. The abdominal CT scan confirmed the diagnosis of Intestinal Intussusception on a digestive wall thickening, with distention of the bowel loops upstream (figure1). Before this intestinal intussusception, the operative decision was made and the patient was operated on. Under general anesthesia, a first laparoscopic approach was performed to explore the abdominal cavity. The exploration confirmed the presence of the intussusception on a parietal thickening located at 2m50 of the angle of treitz, (figure2), Surgery was converted to median laparotomy. The patient underwent oncologic haemal resection of hail with intussusception 1 (Figure 3), with mechanical lateral anastomosis. The anatomopathological study confirmed by the immunohistochemistry of the operative specimen (Figure 4) was in favor of a diffuse large cell lymphoma of B phenotypes. The operative follow-ups were simple and after 4 weeks, the patient was put on adjuvant chemotherapy.

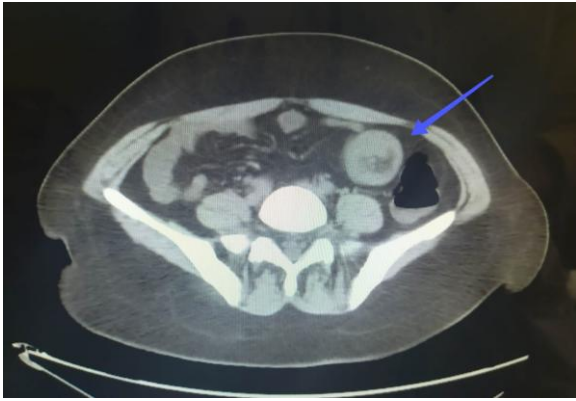


Fig-1: CT image in axial section showing an occlusive syndrome upstream of an acute intestinal Intussusception hailstone on a digestive wall thickening

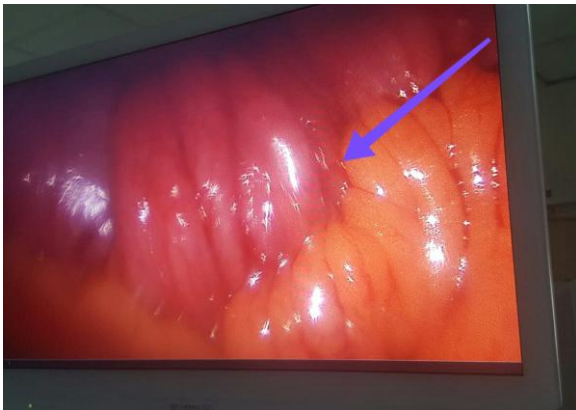


Fig-2: Laparoscopic image showing the invaginated handle

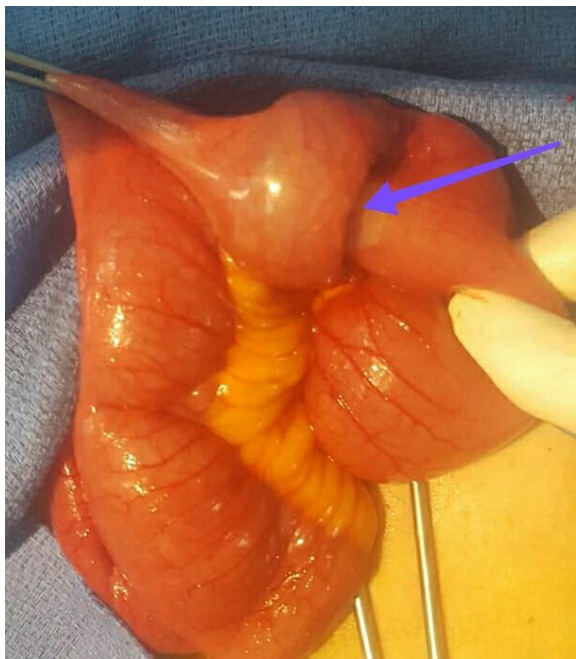


Fig-3: Intraoperative image showing intestinal hailstone intussusception



Fig-4: Image of the operative piece

DISCUSSION

Intestinal Intussusception are relatively rare in adults. They represent 2 to 4% of the intestinal obstruction of the adult [1]. Acute intussusception is defined as the telescoping and penetration of an intestinal segment (invaginated loop) into the downstream segment (receiving loop). Their evolutionary mode is usually subacute or chronic. Anatomically, the ileum is considered as a zone of preferential attack, colocolic invaginations present only 27% of the cases. Rarer are colorectal, colo-anal or jejuno-gastric invaginations [3]. Unlike primitive forms of the infant [4], an organic lesion is found in 80% of cases in adults, most often benign in the small bowel and malignant in the colon [5]. These organic lesions are represented by stromal tumors, lipomas, polyps, lymphadenopathies, digestive thickenings especially ileocecal. Melanoma, adenocarcinoma and metastases are found in approximately 15% of intussusception [6].

Acute intussusception on gastrointestinal lymphoma is rare, as is the case in this patient. Classically in adults, the evolution of intussusception is chronic with intermittent abdominal pain associated with sub-occlusive seizures. The acute form is especially the prerogative of the ileal-ileal forms. For Mondor, the acute form is the ultimate stage of chronic intussusception for which early diagnosis would not have been made [7]. The diagnosis is mainly done by imaging (ultrasound, CT scan), more rarely by exploratory surgery. Radiographically, unprepared x-rays of the abdomen may contribute to the diagnosis of

small bowel occlusion, but in most cases, this examination provides little information. Abdominal ultrasound is an examination reliable and appears promising for the diagnosis of intussusception [8,2], it typically gives a longitudinal image of a target image with two peripheral hypoechoic rings and an echogenic central ring, and in cross-section [8, 2] an image in "Sandwich" with three cylinders superimposed, which corresponds to the invagination roll. Despite the importance of the data provided by ultrasound, it is often hampered by the presence of air in case of occlusion. Our patient did not have an abdominal ultrasound. Abdominal CT with emergency contrast injection is used to increase the sensitivity of the diagnosis, which can reach 90% with a specificity of 100% in adults [9]. It allows to diagnose the obstructive syndrome, its mechanism, in this case intussusception, its precise location and to show its cause (intraluminal or extraluminal mass). It can detect an organic cause in 71% of cases. Its role is more important in case of suspicion of an abdominal lymphoma, lipoma, tissue lesion related to a polyp. It allows objectifying a thickening of the digestive wall associated with adenopathies in case of lymphoma, an intraluminal lesion of fat density in the center surrounded by a digestive wall in case of lipoma, or tissue density in case of polyp. The two classic images are the "sandwich" image in longitudinal section drawing the IIA's head and the "roundel" image in cross section showing the IIA's boudin. In our case, the scanner was of a great contribution; it allowed the demonstration of an occlusive syndrome upstream of an intestinal intussusception acute hailstone on a digestive wall thickening of the incarcerated snare with several coelio mesenteric lymphadenopathy s evoking a tumoral origin. The treatment is always surgical in adults and leaves no room for reduction by hyperpressure under radiological control. More or less extensive resection may be necessary [10]. The use of simple disinvagination is lawful in idiopathic forms. Intestinal excision while respecting oncological imperatives is essential when the discovery of a malignant tumor. Our patient had a carcinological resection. The anatomopathological study is necessary for the diagnostic confirmation and must be supplemented in some cases by an immunohistochemical study (the case of lymphomas). The prognosis is related to the duration

of evolution, the extent of the lesions and the nature of the cause [11].

CONCLUSION

Intestinal intussusception on lymphoma is a rare condition in adults. Ultrasound and especially CT have an essential place in the diagnosis of intussusception and its cause, resection of the invaginated segment is always necessary because it is often secondary to an organic lesion that must be treated.

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