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Intestinal Intussusception in Adults

Rhyma Didelle Corine Matsimouna[1*], El Mehdi Boutajanouit[1], Badr Daoudi[1], Asma Hamri[1], Youssef Narjis[1], Ridouan Benelkhaiat[1]

[1]General Surgery Department, Ibn Tofail Hospital, CHU Mohammed VI, Cadi Ayyad University, Marrakech, Morocco

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***Corresponding author:** Rhyma Didelle Corine Matsimouna
General Surgery Department, Ibn Tofail Hospital, CHU Mohammed VI, Cadi Ayyad University, Marrakech, Morocco

Abstract **Case Report**

Acute intestinal intussusception is a pathology of infants and small children. Its occurrence in adults is very unusual. It is of various etiologies. In the vast majority of cases, it is secondary to a tumour which may be benign or malignant. A benign fibrous tumour of Meckel's diverticulum revealed by intestinal intussusception is a very rare entity. We report the case of a 42-year-old female patient admitted to the emergency department of the Mohammed VI University Hospital in Marrakech, Morocco, for an intestinal obstruction. Abdominal CT scan showed an acute ileocecal intestinal intussusception, associated with a tumor lesion of 25 cm in diameter. Treatment was open surgical carcinological resection. Pathological and immunohistochemical examination of the surgical specimen concluded that the tumour was benign Meckel's diverticulum. Intestinal intussusception is a rare condition in adults. It most often leads to the discovery of an organic cause which may be tumour. From this new case and after analysis of the literature, we discuss the clinical and diagnostic characteristics and the therapeutic possibilities of this rare pathology.

Keywords: Acute intestinal intussusception, Intestinal obstruction, Intestinal resection, Adult.

INTRODUCTION

We report the case of a 42-year-old woman who consulted the emergency department of the Mohammed VI University Hospital in Marrakech, Morocco, several times for unspecific abdominal pain.

The report of this observation is interesting because it highlights a rare pathology: acute intestinal intussusception in adults.

Its diagnosis is difficult and the management is surgical, in order to identify a possible underlying lesion.

OBSERVATION

This is a 42-year-old female patient with a history of left breast cancer ten years ago, treated by surgery, chemotherapy and radiotherapy, and a hysterectomy associated with an oophorectomy eight years earlier. She is also being followed for osteoporosis and drug-induced hepatitis.

Her usual treatment includes uvedose.

She presented to the emergency room for abdominal pain associated with vomiting that had been evolving for 72 hours, without any transit disorder, for which she had consulted a doctor's office in her neighbourhood 48 hours before being admitted to the emergency room, where the local doctor, after carrying out biological examinations (without any particularity), concluded that she had non-specific abdominal pain and a parenteral symptomatic treatment was administered. The evolution was marked by a regression of the symptomatology, then a return home with a prescription of phoroglucinol.

Two days later, the patient consulted the emergency room of the Mohammed VI University Hospital of Marrakech for persistent paroxysmal pain.

The initial evaluation at the reception desk revealed an apyretic patient (37.4°C), hemodynamically and respiratory stable, with a blood pressure of 143/75 mmHg and a pulse of 83/min.

The abdomen is soft, tender to the epigastric, and the hernial orifices are free.

Hydroaerobic sounds are heard. No signs of urinary tract pathology.

The rectal examination is unremarkable.

The biological tests carried out were normal (CBC, blood ionogram, CRP, liver function tests, renal function and lipase), the urine dipstick did not show any haematuria or infectious signs.

An abdominal ultrasound scan was performed and revealed images of a small bowel occlusive syndrome. The work-up was completed by an injected abdominal-pelvic scan which showed an image of an ileo-caecal invagination associated with a tumour lesion of 25 mm in diameter (Fig. 1).

Disinvagination colonoscopy was indicated and performed, finding a tumour, for which a decision was made to proceed with surgery.

Intraoperatively, an ileo-caecal intussusception was found on a tumour approximately 2.5 cm in diameter and the procedure consisted of a monobloc right hemi colectomy, removing the intussusception segment including the tumour (Fig. 2).

The pathological result described a benign fibrous tumour of Meckel's diverticulum.

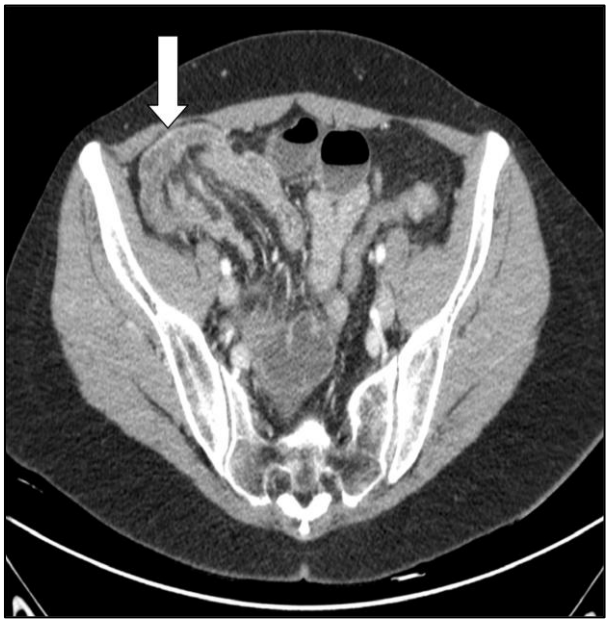

Fig. 1: Injected abdominal CT scan showing ileo-caecal intussusception (arrow indicating intussusception)

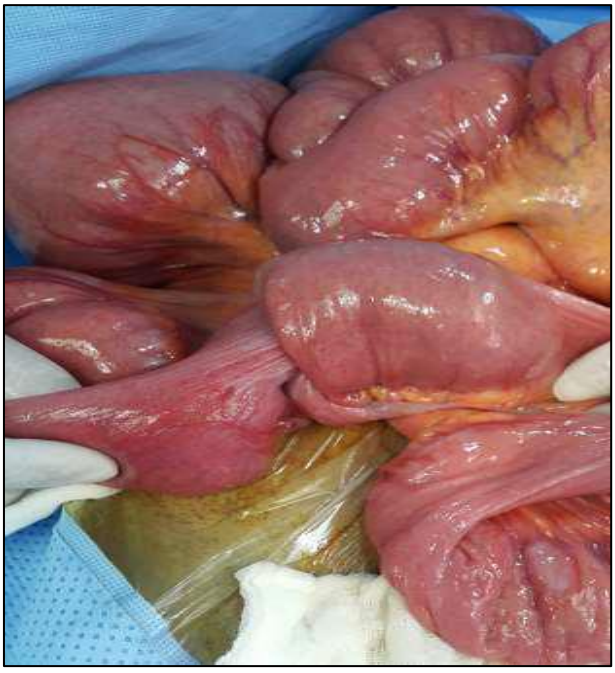

Fig. 2: Intraoperative view showing ileo-caecal invagination

DISCUSSION

Acute intestinal intussusception (AI) in adults is a rare condition representing only 5% of AIs and less than 1% of occlusive syndromes [1]. It is defined by the penetration of an intestinal segment into the one immediately downstream.

It is most commonly found in the ileum, and more rarely in the colon [2]. It has a subacute or chronic course. Unlike in children, it is very often indicative of an underlying organic cause.

In young patients, the cause is mostly benign: lipoma, Meckel's diverticulum, polyps, adenopathy and more rarely malignant pathology such as digestive lymphoma. In the elderly there is a predominance of carcinological pathology and in particular colonic adenocarcinoma [3], carcinoids and lymphomas. Intussusception is rarely idiopathic in adults (8-20% of cases) [4].

Clinically, the symptoms are absolutely non-specific with intermittent pain, nausea, vomiting and poor clinical examination.

In adults, abdominal ultrasound is not the gold standard; however, it can find the typical cocoon image or even the causative lesion.

Abdominal CT scans show signs of obstruction, the cocoon pattern, the causative lesion and assess the viability of the bowel [5]. Given the frequency of underlying lesions, surgical management is essential.

Treatment consists of disinvagination during laparotomy or laparoscopic surgical exploration, as well as etiological management [6].

If the suspected aetiology is malignant, the resection should be extensive, with carcinological intent.

CONCLUSION

In conclusion, IIA in adults is a difficult diagnosis that must be evoked in the presence of acute but also chronic abdominal pain. It is often indicative of an underlying organic lesion requiring therapeutic management.

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