

## Acute Appendicitis Complicated by Strangulated Internal Hernia: Reported Case

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### Abstract

Internal hernias represent less than 1% of the causes of acute intestinal occlusions of mechanical origin, they can be acquired or congenital, among these hernias, an internal hernia of appendiceal origin has never been reported, we report the case of a patient who presented acute appendicitis complicated with strangulated internal hernia.

**Keywords:** Internal hernia, appendix, strangulation.

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### INTRODUCTION

Internal hernias represent less than 1% of the causes of acute mechanical intestinal obstruction [1, 2]. They are linked to peritoneal, mesenteric or epiploic dehiscence of congenital or surgical origin. Because of their rarity, their clinical and radiological diagnosis is not always mentioned at the outset and their discovery is most often operational, sometimes late. We present the case of a patient, who does not meet this classic definition, who presented with a complicated acute appendicitis of strangulated internal hernia

### PATIENT AND OBSERVATION

Patient aged 48, chronic smoking, never operated, who consulted for an occlusive syndrome evolving for 5 days. The clinical examination found a conscious, normocardial, eupnetic, apyretic patient with a distended and tympanic abdomen without peritoneal signs. The hernial orifices were free and the digital rectal exam was normal. X-ray of the abdomen without standing preparation showed hail-like hydro-aeric levels (Fig-1). The abdominal computed tomography objectified an aspect in favor of an obstruction of the small intestine secondary to a small tumor (Fig-2).



Fig-1: Small intestine hydro-aeric levels



Fig-2: Occlusion on small intestine

A median laparotomy was performed urgently. During exploration, a distended loop upstream of some ileal handles (20 cm of ileum) incarcerated in an abnormal orifice between the appendix and the caecum producing a strangulated internal hernia, with the presence of an internal latero-cecal appendage, was objectified. long (about 12 cm), stubborn and inflamed, its point is sphacelated and adherent to the posterior parietal plane, achieving with the caecum that is fixed an orifice that was the cause of the hernia (Fig 3 & 4).

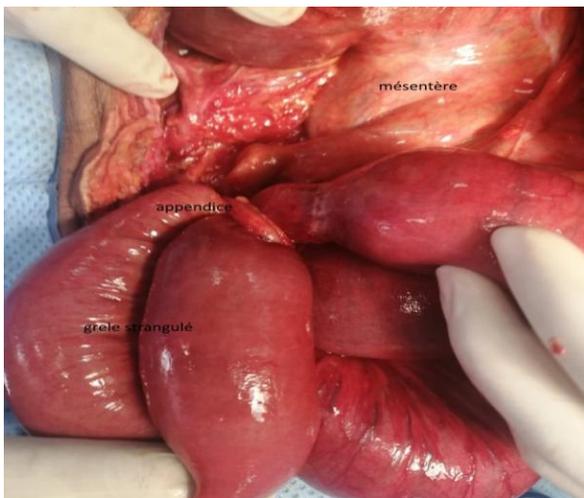


Fig-3: (Anterior view) appendix, incarcerated ileal handles

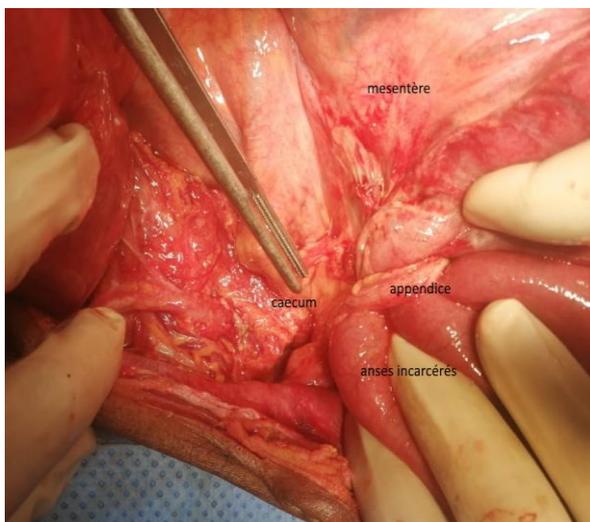


Fig-4: (Posterior view) appendix, incarcerated ileal handles

The reduction of the hernia was carried out, making it possible to note the good vitality of the loop with the presence of two necking zones, one located at the mouth of the last ileal loop at the caecum, and the 2nd at 20 cm of the ileo-caecal valve (Fig 5 & 6).

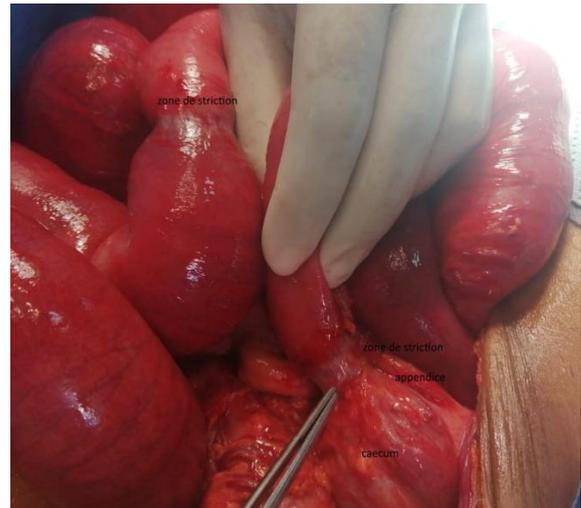


Fig-5: Necking areas

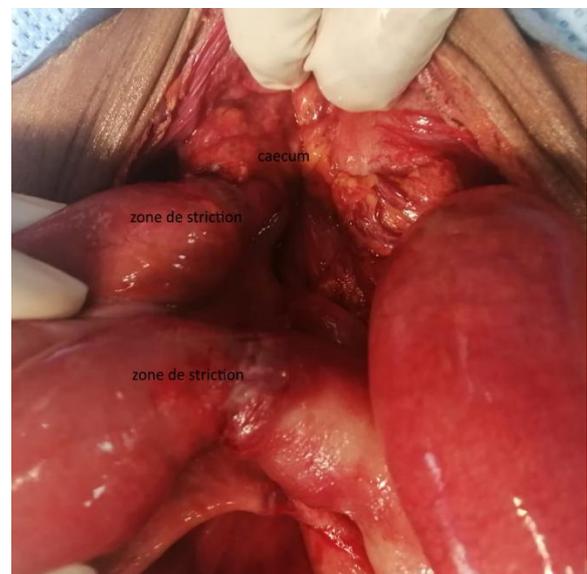


Fig-6: Necking areas

The appendectomy was made after ligation section of the appendicitis mesentery; the two necking zones were respected. The operating suites were simple.

## DISCUSSION

The internal peri-cecal hernias or hernias of Rieux represents approximately 13% of the internal hernias, which are formed with hernial sac constituted by a detachment more in the extended month of the fascia of toldt right which adjoins the right colon and a part of caecum to the parietal peritoneum posterior, its sac develops in contact with the walls of the caecum, 4 varieties of peritoneal recess have been described, upper ileo-cecal recess, lower ileo-cecal recess, retro-cecal recess, paracolic recess [3, 4].

Our case does not correspond to this entity described in the literature but rather to an abnormal orifice formed between the appendix and the cecum, given the presence of a long pelvic appendage, and its inflammation to cause its fixation and its adhesion to the parietal plane posterior, thus creating an internal orifice responsible for an internal hernia which is complicated by strangulation.

**Conflicts of interest:** The authors declare that they have no conflicts of interest.

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