



# Isolated Cecal Ischemia, A Rare Diagnosis: A Report of A Case

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## ABSTRACT

Isolated ischemia of the caecum is a rare condition, with only a few reported cases in the literature and most often manifested by pain in the right iliac fossa. The mode of revelation by occlusive syndrome is unique. With early medico-surgical management, the prognosis is relatively excellent. We report an original case of isolated ischemia of the caecum revealed by an occlusive syndrome.

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## 1. Introduction

Isolated nonocclusive ischemic colitis is rare. It most often affects the left colonist. The symptomatology is atypical and the preoperative diagnosis is very difficult. It usually results from atherosclerosis and / or low blood flow.

However, ischemic colitis involving the cecum alone is quite rare, with only a few cases reported in the literature. [1] in the majority of cases, it is manifested by pain in the right iliac fossa

We report an original case of isolated ischemia of the caecum revealed by an occlusive syndrome.

## 2. Observation

We report the case of a 40-year-old patient with no particular pathological history who is admitted to the emergency department in a chart of open occlusive syndrome. The abdomen was distended and very sensitive.

The abdominopelvic CT showed a distention free of obstacles with signs of suffering from the cecal wall. The appendix was normal (Figure 1). Surgical exploration showed pan-parietal necrosis of the cecum. A right hemicolectomy was performed (Figure 2). The suites were simple with a decline of 6 months. Pathological examination confirmed caecal transparietal ischemia without signs of malignancy.



Figure 1. CT image showing thickening and pneumatosis of the caecal wall.



Figure 2. Right hemi-colectomy piece showing ischemic changes in the cecum.

## 3. Discussion

The colonic ischemia can be of occlusive origin or not. [2] Non-occlusive ischemic colic is due to mesenteric vasoconstriction secondary to a low flow state (shock) [3]. Isolated involvement of the cecum can occur following atherosclerotic occlusion or thromboembolism of the caecal arteries. [4]

Unlike our patient, it occurs in patients with cardiovascular factors, in patients who have had open-heart surgery, patients under certain medications or in chronic hemodialysis patients. [5,6]

The isolated caecal form is exceptional. This is a diagnostic challenge because it is an unusual, less-known and atypical presentation of acute ischemia of the colon [7]. In the majority of cases, the pain occurs in the right iliac fossa and is suggestive of either appendicitis or colon carcinoma, and typically develops a generalized muscular defense within hours to 48 hours [8]. The case reported in this work represents the peculiarity of being manifested by an intestinal obstruction making him an original case.

Biology is not contributive to the diagnosis since currently, there are no specific serum markers for colonic ischemia.

Imaging in non-occlusive forms is often inconclusive, however, indirect signs such as the presence of colonic pain may suggest the diagnosis. Abdominal ultrasound may be useful in some cases but may also show no evidence for ischemia or caecal necrosis [9,10].

At abdominopelvic CT, thickening of the caecal wall with isolated pneumatosis coli strongly suggests the diagnosis of caecal ischemia [11]

Colonoscopy is known to have limited space in emergency situations. No colonoscopy was done for our patient [12]

Early surgical management allows healing in the majority of cases. The diagnosis of cecal ischemia is most often made during diagnostic laparoscopy. Partial cecal necrosis can be treated by laparoscopic partial caesarean resection [13]. If there are signs of peritonitis, right hemicolectomy with anastomosis can be performed with good results [14].

#### 4. Conclusion

Isolated infarction of the cecum should be included in the differential diagnosis of right iliac fossa pain. Revelation with an occlusive syndrome is rare. However, in patients with cardiac history and in chronic hemodialysis, the diagnosis must occur in the minds of the patricians. With early medico-surgical management, the prognosis is relatively excellent.

#### Conflict of Interest:

The authors do not declare any conflict of interest.

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