

## Case Report

# The Colonic Pseudotumoral Form of Crohn's Disease: About a Case at the Sourô Sanou University Hospital Center in Bobo-Dioulasso

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**Abstract:** Crohn's disease is a chronic inflammatory bowel disease (IBD) that can affect all segments of the digestive tract. For long time, it is a pathology considered to be uncommon among African blacks. It constitutes a heterogeneous group both in its etiopathogenesis and in its clinical and progressive presentation. The pseudotumoral form remains exceptional. We report a case of this form, observed in a 44-year-old patient. The pseudotumoral form of colonic Crohn's disease was diagnosed based on morphological, histological and progression criteria. This illustrates the need for multiple and repeated biopsies to eliminate malignant tumor, tuberculosis, intestinal parasitosis and other causes of digestive granulomatosis.

**Keywords:** Crohn's Disease, Pseudotumor, Surgery, Bobo-Dioulasso, Burkina Faso

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## 1. Introduction

Crohn's disease (CD) is a chronic inflammatory bowel disease (IBD) that can affect all segments of the digestive tract from the mouth to the anus. It is a pathology long said to be uncommon in african black. In Burkina Faso, the first case of CD was described by Bougouma [1] which reported two cases among native Burkinabe in the year 2000. It is a pathology that poses a problem of diagnosis and management in Sub-Saharan Africa where affections of the digestive tract are still dominated by infectious diseases and digestive functional

disorders. Its pseudotumoral form, exceptional and poorly described in the literature, remains to be evoked in an African context after having eliminated an infectious pathology (amoeboma, tuberculosis), malignant or any other cause of digestive granulomatosis [1, 2]. We report a case of colonic Crohn's disease in its pseudotumoral form.

## 2. Observation

A 44-year-old patient, teacher and headmaster of a rural primary school, was referred to the department of

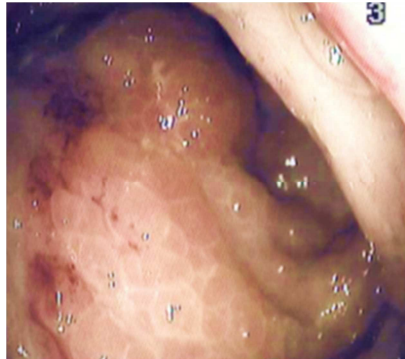
hepato-gastroenterology at the Sourô SANOU university hospital in April 2018 for abdominal pain. The symptomatology that had been evolving for two (2) months was initially marked by the onset of constipation, bloating and vomiting, without a specific schedule. Treatments based on antiparasitic agents (Albendazole and Metronidazole), prokinetics (Trimebutine) and laxatives (Macrogol) have only led to a transient improvement. The patient was referred for gastroenterology consultation in the presence of abdominal pain type intense torsions of flanks that radiate secondarily to the rest of the abdomen, accompanied by weight loss about 10 kilograms.

He had no particular pathological history and did not consume alcohol or tobacco.

The physical examination outside a diffuse abdominal sensitivity on palpation had found no mass.

Complementary examinations that could be carried out, we found:

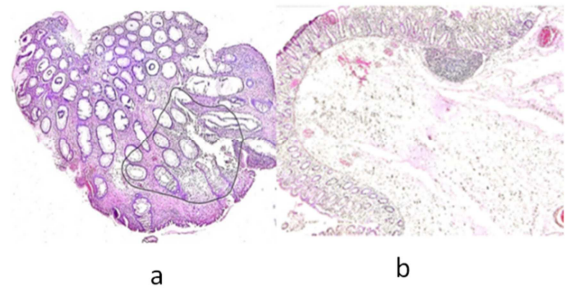
- i. In biology, normal blood count, C-Reactive Protein (CRP) elevated to 160 mg / L, hypo-albuminemia to 32 g / L, normal blood ionogram. Stool culture and parasitological stool examination revealed no enteropathological germ.
- ii. at the endoscopy, colonoscopy revealed an ulcero-budding and stenotic mass in the right colon (Figure 1). Upper digestive fibroscopy had found congestive pangastropathy, prepyloric ulceration, and nodular duodenopathy.



**Figure 1.** Endoscopic appearance: ulcer-bougeonous and stenosing tumor of the right colon.

- iii. at the histopathological study of the biopsy pieces, we had found:

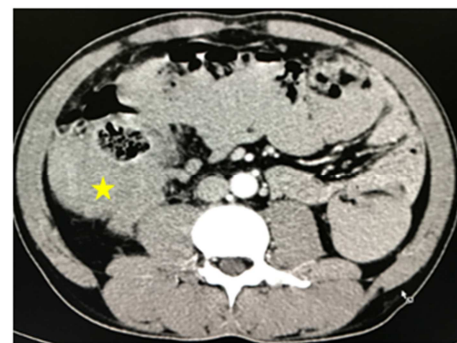
- a) at the colic level, mucosal lesions made of ulcerations on the surface with crypts and elongated, tortuous and deformed glands associated with cryptitis lesions. The chorion was congestive with a dense polymorphic inflammatory infiltrate associating lymphocytes, plasma cells, and numerous neutrophilic and eosinophilic polynuclear cells. The submucosa was intact and there was no tumor infiltrate (Figure 2 a and b).



**Figure 2.** Histological aspect showing a polymorphic inflammatory infiltrate of the sub mucosa.

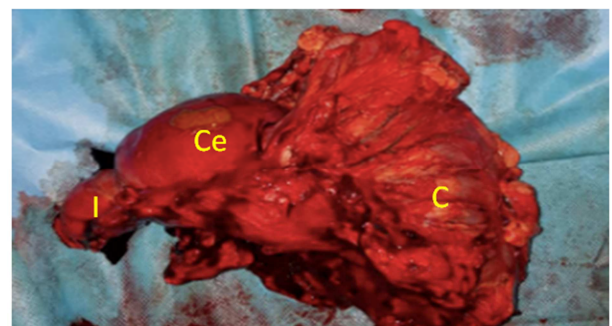
- b) at the gastroduodenal level, non-atrophic chronic gastritis without intestinal metaplasia. *Helicobacter pylori* was absent. The duodenal mucosa was the site of chronic none specific duodenitis.

The initially favorable clinical course under oral azathioprine and prednisone, that was marked by a sedation of the pain and a weight gain, was aggravated three (03) months later by the appearance of a painful mass of the right flank associated with a sub-occlusive syndrome. A CT-scan had found a lesion with criteria for the malignancy of a right colic tumor invading the pericolic fat and the right renal lodge (Figure 3).



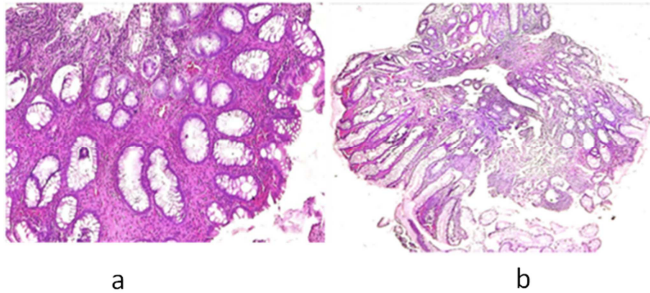
**Figure 3.** Scan image: right colonic tumor infiltrating the pericolic fat.

A laparotomy was indicated and ascites, a voluminous mass of the ascending colon attached to the psoas floor infiltrating the right renal lodge without invading it and enveloping part of the lumbar ureter was found. A right hemicolectomy with ileotransverse anastomosis was performed (Figure 4).



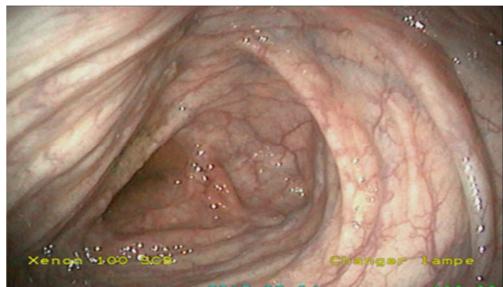
**Figure 4.** Operating part: right hemicolectomy (I: terminal ileum; Ce: cecum; C: colon) carrying away the tumor of the ascending colon.

The anatomopathological study of the operative specimen revealed at the level of the chorion a characteristic lesion of colonic Crohn's disease, namely the epithelioid and gigantocellular granuloma without caseous necrosis. The sub-muscularis was fibrous and extended by edema, the muscularis was of variable thickness and included hyperplastic nerve cells, the subserosa was the seat of a vasculo-exudative remodeling (Figure 5 a and b).



**Figure 5.** Histological aspect showing a polymorphous, granulomatous, epithelioid and gigantocellular inflammatory infiltrate.

The follow-up was simple and the evolution was good under the treatment with azathioprine which was continued. Colonoscopy was performed six (6) months after the operation and returned to normal (Figure 6).



**Figure 6.** Control colonoscopy after surgical treatment (right colectomy with ileocolic anastomosis).

### 3. Discussion

We thus report a case of colonic Crohn's disease in its pseudotumoral form. Crohn's disease remains an exceptional diagnosis in sub-Saharan Africa, where digestive tract diseases are most attributed to parasitic, microbial infestations and digestive functional disorders that constitute the main part of colonic pathology [1].

IBD has long been considered rare in the black subject [3-5]. However, studies conducted over the past few decades have highlighted an increase in the frequency of these pathologies in black subjects, whether on the American continent or in Africa [2-5]. This increase in frequency is attributed, on the one hand, to an overall improvement in living conditions with an increase in hospital attendance, the training of practitioners and the multiplication of diagnostic centers, and on the other hand to changes in eating habits with heavy consumption of industrial foods that are too fat, sweet and / or salty, low in fiber and smoking [1, 3, 5]. Crohn's disease is a pathology that

remains unclear and constitutes a heterogeneous group both in its etiology and in its clinical, evolutionary and morphological presentation. Its classic endoscopic appearance includes progressive lesions including ulcerations, edema, congestion, fistulas and ulcerative strictures, and a scarred appearance including scars from ulcerations, pseudopolyps and non-ulcerated stenosis [6]. The first cases of CD were reported in Burkina Faso by Bougouma, who described two cases of colon localization among indigenous people [1]. The pseudotumoral form remains exceptional. Its clinical presentation is variable. We reported in 2006, a case in the endoscopic series at Ouagadougou University Hospital Yalgado Ouedraogo. He was a 23-year-old man with diarrhea-like transit disorder and a right-sided mass "unpublished" [7]. Rectorragies, transit disorders associated with an alteration of the general state have been reported in a 46-year-old patient by Mnif in Tunisia [8]. Other authors have reported dysentery syndrome and abdominal mass. In our 44-year-old patient, transit disorders associated with pain were symptomatic [9, 10]. The physical examination of our patient was normal apart from a sensitivity to the right flank. These clinical pictures are mostly treated routinely as functional digestive disorders, parasitic and / or bacterial conditions in the first and second level health centers in our country. It is in front of the exacerbation of the symptoms on a background of slimming that the patient was referred to us. Colonoscopy is not in great demand at these centers where specialist doctors are not very affected. Organic recto-colic pathology is dominated in our context by parasitic infestations. In hospitals in Ouagadougou, parasitic recto-colic colitis accounts for 28.5% of organic recto-colic pathology, and 99.4% of this is of amoebic origin [7]. They often share the same clinical signs and endoscopic aspects as IBD [1, 2, 7]. A diagnosis problem can also arise with a malignant colon tumor. In our patient, the discovery of an ulcero-budding and stenosing mass of the right colon at the colonoscopy, made us evoke a priori a malignant tumor. Anatomopathological examination eliminated the diagnosis of cancer in the absence of tumor cells. The detection of gigantocellular epithelioid granulomas without caseous necrosis associated with fibrosis and inflammatory reaction, should be discussed sarcoidosis, a foreign body reaction, or parasitosis. Evolutions under specific treatments (azathioprine and corticosteroids), marked by the regression of symptoms allowed us to retain the diagnosis of Crohn's disease. The same observations have been made in the literature [8, 9]. The clinical course in our patient, which was good at first, was subsequently marked by the occurrence of a right-sided mass and a sub-occlusive syndrome. A carcinological surgery was performed in front of the malignancy of a right colon tumor invading the pericolic fat and the renal lodge. This hypothesis was sustained by the findings made at laparotomy with the discovery of an ascites blade, a voluminous mass of the ascending colon attached to the floor of the psoas infiltrating the right renal box without invading it and enveloping a portion of the lumbar ureter. Thus, the literature reports the risk of degeneration during CD and the increased risk of treatment with thiopurines [11].

Once again, the anatomopathological study of the operative specimen made it possible to rule out the diagnosis of colon cancer. Subsequent management consisted of continued treatment with azathioprine. The evolution was favorable with normal endoscopic control at six months post-surgery.

## 4. Conclusion

The pseudotumoral form of Crohn's disease is a rare entity whose epidemiological and clinico-morphological characteristics can simulate colon cancer. The diagnosis concerns the histology of the colon resection piece. Postoperative course and follow-up are generally good under immunosuppressive therapy.

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