**SAS Journal of Surgery**
Abbreviated Key Title: SAS J Surg
ISSN 2454-5104
Journal homepage: https://www.saspublishers.com

OPEN ACCESS

**Surgery**

# Rectal Cancer - An Unrecognised Complication of Crohn's Disease: Case Report

Fatima Zohra Ben Moula[1*], Lotfi Azzouz[1], Ihab Youssef[1], El Mouatassim Zakaria[1], Othman Arsalan[1], Hadj Omar El Malki[1], Al Mountassir Cherif Chefchaouni[1], Lahcen Ifrine[1], Abdelkader Belkouchi[1]

[1]Surgery Department, A, Ibn Sina Hospital, Rabat, Morocco

**DOI:** 10.36347/sasjs.2022.v08i09.002 | **Received:** 09.07.2022 | **Accepted:** 17.08.2022 | **Published:** 08.09.2022

***Corresponding author:** Fatima Zohra Ben Moula
Surgery Department, A, Ibn Sina Hospital, Rabat, Morocco

**Abstract** | **Case Report**

Crohn's disease is a frequent and invalidating pathology. The development of colorectal cancer in long- standing Crohn's disease patients has become a major complication, but which unfortunately is underestimated and not so much evaluated in current practice. And to underline this and remind clinicians of it we present our case. This article presents a patient with Crohn's disease who experienced the two known complications, severe acute colitis and ano-perineal lesions, and who developed invasive adenocarcinoma on the rectum remaining 20 years after subtotal colectomy.

**Keywords**: Crohn's disease, colorectal cancer, adenocarcinoma, The postoperative period.



## INTRODUCTION

Crohn's disease (CD) is an inflammatory bowel disease characterized by chronic and transmural inflammation. It could have an impact on the entire digestive system, from the mouth to the anus [1].

Patients with Crohn's disease are more likely to develop cancer due to the disease's persistent systemic inflammation. In comparison to the general population, they face a risk that is two to three times greater [1].

In this paper we present the case of a patient, followed for Crohn's disease with rectal degeneration, and through her history we recall the epidemiological aspects and risk factors of the malignant transformation.

## OBSERVATION

A 45-year-old woman had a 28 year history of ileocolonic crohn's disease.

The patient was diagnosed with Crohn's disease in 1994. She experienced recurrent diarrhea and abdominal distension. After diagnosis, she received symptomatic treatment with sulphasalazine and steroids for several years. In 2000, due to exacerbation of his symptoms, with severe acute colitis, which was corticosteroid resistant, subtotal colectomy and ileo-rectal anastomosis were performed. The postoperative period was marked by complete remission with clinical improvement and resolution of diarrhea.

Until 2010, complex anal fistula appears with multiple external orifices and several fistulous tunels. She was given infliximab with great tolerance. she was lost to follow -up for the next ten years.

In July 2020, at 43 years of age, she returned with an evolued anal tumor.

Rectal examination revealed skin excoriation around the anus and a tumor 2 cm × 3 cm in diameter, involving 6 cm from the anal margin.

Blood analysis revealed anemia with a hemoglobin level of 9 g/dL, Tumor Marker Tests were high, carcinoembryonic antigen concentration was 42.48 ng/mL, carbohydrate antigen 19-9 (CA19-9) was 762.80 U/mL, Colonoscopy through the anus detected a mass 6 cm from the anal margin.

Well-differentiated adenocarcinoma in the rectum was discovered by pathological analysis of the endoscopic biopsy specimen.

The patient was diagnosed with rectal cancer T3N1M0 away from the internal sphincter based on the imaging tests (Figure 1).

After concomitant radiochemotherapy, we performed total mesorectal excision with the resection of the rectum (Figure 2) and ileal pouch–anal anastomosis protected with diverting ileostomy.

Histological diagnosis was adenocarcinoma with lymph node metastases.

The procedure was successfully finished. On the 7th postoperative day, the patient was released after making a good recovery.

3 months later, she had the ileostomy closed, and since then she has been fine and has no complaints.

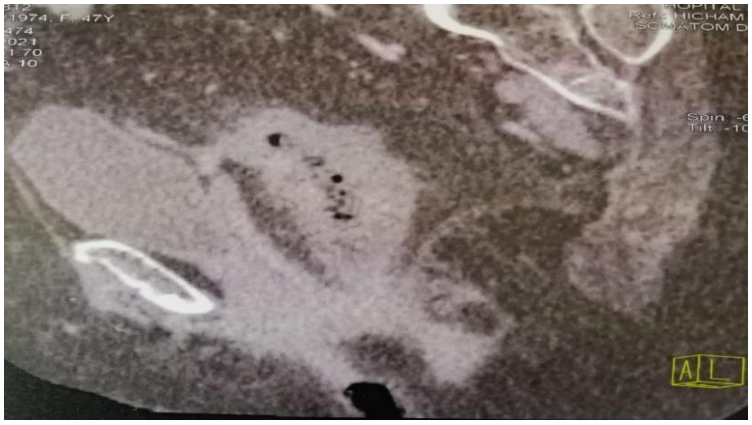

**Figure 1: sagittal scan section that show tumour growth of the recum which is distant from the internal sphincter**

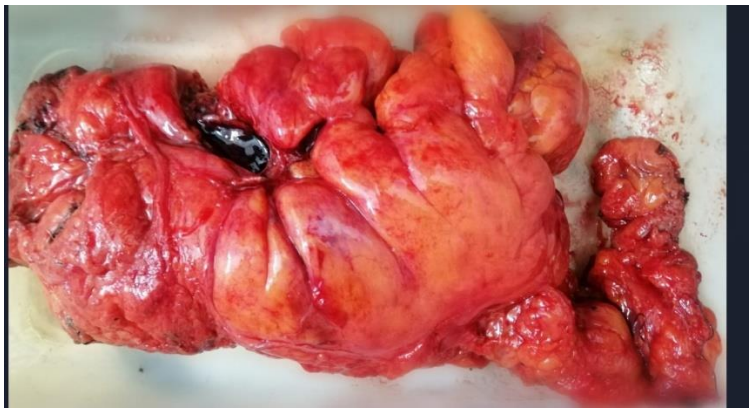

**Figure 2: image of the resection piece showing the degenerated rectum with the old ileorectal anastomosis**

## DISCUSSION

Warren *et al.,* published the first study on Crohn's disease associated cancer (CDAC) in 1948, and other reports examining the epidemiology of CDAC have since been published [2].

Among long-term CD patients, colorectal cancer development has emerged as a serious consequence.

Colorectal cancer complicating CD has distinct traits from sporadic colorectal cancer. The likelihood of a casual diagnosis is higher, and the median age at diagnosis is earlier (55 vs 65 years). Additionally, the prevalence of the mucinous and signet cell varieties of adenocarcinoma is higher (30 percent vs. 10 percent) [3].

Latency in cancer diagnosis may be a contributing factor to poor survival in people with CD-associated CRC since CD symptoms might make cancer symptoms appear different [4].

Certain authors also noted a less encouraging prognosis for Crohn's carcinoma. The pathogenesis of cancer in Crohn's disease patients continues to be up for debate. While a dysplasia-carcinoma sequence is only known in ulcerative colitis, certain studies have shown that dysplasia can develop in Crohn's disease patients.

Both sporadic cancer and CD patients have genetic changes in the p53 gene and an accumulation of c-k-ras. In opposed to sporadic carcinoma, Crohn's carcinoma does not exhibit TGF-R II gene changes, allelic losses of 5q (the APC gene), or DCC areas (deleted in colon cancer gene region on q18) [3].

According to the literature, a specific subset of CD patients is at an increased risk of getting colorectal cancer. Early start, untreated severe colitis, a duration of more than 8 years, strictures, fistulae, and surgically excluded colon portions are risk factors [3].

A considerably decreased risk of colorectal cancer was linked to having a colonoscopy for

screening or monitoring purposes .Performing surveillance colonoscopies every one to two years beginning eight to ten years after CD onset, is advised by the American Society for Gastrointestinal Endoscopy guideline [5].

The effective anti-TNF drug infliximab is frequently prescribed to treat inflammatory bowel disease. However, numerous papers have detailed the prevalence of different cancers in patients receiving infliximab treatment [5]

So the Clinicians should closely monitor patients who are receiving TNF inhibitor medication for the possibility of rectal cancer induced [5]. (especially those followed for ano-perineal lesions (e.g. our patient who let her tumour grow, by linking the rectal syndrome to her old anal fistula) and unfortunately if our patient was regulary followed up we could detect the tumour at an early stage and we could propose an endoscopic mucosectomy and she would have been avoided the radiotherapy and the heavy rectal surgery.

## CONCLUSION

Among long-term CD patients, colorectal cancer development has emerged as a serious consequence.

Nevertheless, it still seems important to regularly monitor these Crohn's disease patients and conduct periodic endoscopic biopsy examinations, particularly in those who have a surgically implanted rectal stump [6].

## REFERENCES


1. Fornaro, R., Frascio, M., Caratto, M., Caratto, E., Bianchi, R., Razzore, A., ... & Casaccia, M. (2018). Adenocarcinoma arising from perianal fistulizing Crohn's disease. *Case Reports in Gastroenterology*, *12*(2), 390-395.
2. Shibuya, K., Homma, S., Yoshida, T., Ohno, Y., Ichikawa, N., Kawamura, H., ... & Taketomi, A. (2018). Carcinoma in the residual rectum of a long-standing Crohn's disease patient following subtotal colectomy: A case report. *Molecular and Clinical Oncology*, *9*(1), 50-53.
3. Koslowsky, T. C., Ganssauge, C., Schlosser, D., & Siedek, M. (2000). Two cases of colorectal cancer complicating Crohn's disease and review of the literature. *Langenbeck's Archives of Surgery*, *385*(7), 485-487.
4. Hayashi, T., Nakamura, T., Kurachi, K., Fukazawa, A., Nakajima, A., Nakamura, K., ... & Konno, H. (2007). Crohn's disease-associated colorectal cancer in Japan: report of four cases. *International journal of colorectal disease*, *22*(12), 1537-1542.
5. Xiao, L., Sun, L., Zhao, K., & Pan, Y. S. (2021). Crohn's disease with infliximab treatment complicated by rapidly progressing colorectal cancer: A case report. *World Journal of Gastrointestinal Oncology*, *13*(4), 305. [cited 2022 Aug 1]. Available from: https://www.wjgnet.com/1948-5204/full/v13/i4/305.htm
6. Freeman, H. J. (2001). Colorectal cancer complicating Crohn's disease. *Canadian Journal of Gastroenterology*, *15*(4), 231-236.