



# Colon lymphoma: A Case Report and Literature Review

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## **Authors' contributions**

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

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**Case Report**

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## **ABSTRACT**

Colorectal lymphoma is a rare and uncommon entity, its diagnosis is most often delayed given the non-specific symptoms.

We report the case of a patient who complained of an abdominal pain and was diagnosed with right colon lymphoma. The treatment is made on a case-by-case basis.

The purpose of this case is to describe our experience based on surgery as the cornerstone of treatment.

**Keywords:** *Colon lymphoma; non-hodgkin lymphoma; surgery; chemotherapy.*

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## 1. INTRODUCTION

Colon lymphoma is a rare type of gastrointestinal lymphoma and represents 0.2% to –1.2% of all primary colon cancers [1], the stomach and small bowel are more frequently affected. The most common variety of colonic lymphoma is non-Hodgkin's lymphoma (NHL).

Most cases are diagnosed between the age of 50 and 70 years, with a male predominance (2/1).

“The presentation is usually nonspecific, leading to a delay in diagnosis, anthe symptoms suggestive of colonic lymphoma are mainly aspecific. The treatment varies from chemotherapy alone to multimodal therapies combining surgery, chemotherapy and radiotherapy” [2,3].

## 2. CASE REPORT

A 38-year-old male patient with no medical history, who was admitted for a complaint of hypogastric and left iliac fossa pain for more than two months associated with a chronic constipation.

Abdominal examination reveals hypogastric tenderness with a palpable mass, and rectal examination does not identify any abnormalities.

The initial biological assessment was normal, with a hemoglobin value of 13.2 g/dL, white blood cells 9300/mm<sup>3</sup> and platelets value of 209000/mm<sup>3</sup>.

Abdominal CT Scan revealed a circumferential thickening of the right colon wall with some mesenteric adenopathies in the right iliac fossa.

Colonoscopy showed an irregular hyperplasia and congestion of the intestinal mucosa of the right colon with partial luminal obliteration, multiple biopsies were taken and pathological analysis were inconclusive.

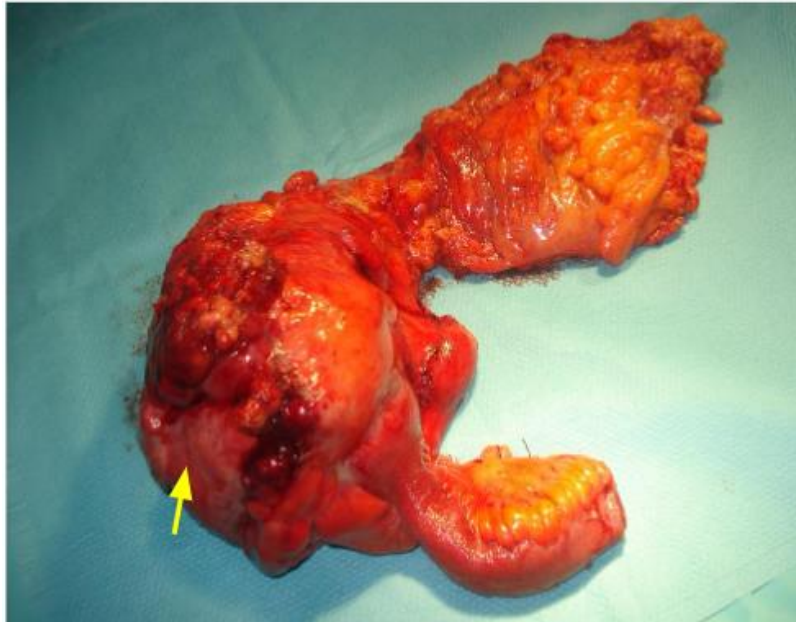
Our patient underwent surgery, a median laparotomy was performed which revealed a mass in the ascending colon, neither ascites nor secondary deposits in the liver or peritoneum were detected at exploration. Right hemicolectomy was performed with ileo-transverse, side-to-side anastomosis.

Histopathological investigation of the resected mass revealed it to be lymphoma. Immunohistochemically, tumor cells were found positive for CD20 and CD45, but negative for CD3, which allowed us to make the diagnosis of diffuse large B cell lymphoma.

The resected margins were tumor free and the lymph nodes showed reactive hyperplasia.



Fig. 1. Abdominal CT scan showing right colon parietal thickening (Yellow Arrow)



**Fig. 2. Resected mass of the ascending colon (Yellow Arrow)**

Outcomes were uneventful through the patient was referred to Oncology department where he received six cycles of chemotherapy following surgery (CHOP).

### 3. DISCUSSION

“Lymphomas of the gastrointestinal tract are the most common type of primary extranodal lymphoma, representing 5-10% of all non-Hodgkin's lymphoma [4]. Majority of these arise in the stomach (up to 65% of all GI lymphoma) followed by the small bowel (20–30%) with rest arising in the colon and rectum” [4–6].

“Primary lymphoma of the colon is a rare tumor of the gastrointestinal tract that comprises only 0.2-1% of all colonic malignancies” [7].

“The most common symptoms of colonic lymphoma are abdominal pain, nausea, vomiting, weight loss, abdominal mass, transit disorder” [7,6] rarely obstruction [5,6], These non-specific symptoms explain the delay in diagnosis [6]. Large masses can usually be palpated by a simple physical examination.

“Colorectal lymphoma is screened often by computed tomography (CT). It provides extraluminal and anatomical information about the size and extent of the tumor, the depth of invasion, and the involvement of regional lymph nodes. Radiographic findings associated with colorectal lymphoma are generally nonspecific and show significant similarity to those of other

types of colorectal disease including colorectal adenocarcinoma” [8].

“Due to its rarity and non specific clinical and radiographic signs, the diagnosis of colorectal lymphoma is difficult to make. In the non-emergency setting, the diagnosis can usually be made preoperatively through a colonoscopy to obtain tissue biopsies” [8].

Surgery is the mainstay of treatment followed by chemotherapy [9]; radical resection of the tumor (hemicolecotomy) is then performed plus adjuvant multidrug therapy based on the CHOP protocol (cyclophosphamide, doxorubicin, vincristine and prednisolone). Surgery alone may be considered suitable treatment for patients with low-grade NHL whose infiltration has not spread beyond the submucosa [9]. In late stages patients, biopsy is followed by multi-drug chemotherapy [10], However, “the prognosis of colon lymphoma is related to surgery, so it seems appropriate and prudent to resect colon lymphoma whenever possible” [11,12].

Prognosis is often varied with median survival of above 5 years reported in various series.

### 4. CONCLUSION

Colorectal lymphoma is a rare disease, constituting a small percentage of colorectal malignancies and gastrointestinal lymphomas.

Most patients present nonspecific symptoms, which often delays the diagnosis and leads to an advanced stage at the time of diagnosis.

Treatment of colorectal lymphoma usually consists on surgery followed by multi-agent systemic chemotherapy.

Unfortunately, despite aggressive treatment, the majority of colorectal lymphoma patients eventually experience recurrence.

## ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the authors.

## CONSENT

As per international standards or university standards, patient written consent has been collected and preserved by the authors

## DISCLAIMER (ARTIFICIAL INTELLIGENCE)

We hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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