

Primary Colorectal Lymphoma: Case Report and literature Overview

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Abstract

The Primary Colon Lymphoma (PCL) represents less than 1% of colonic tumors, usually present as acute abdomen in elderly patients. Constitutes 6%-12% of all gastrointestinal lymphomas, differently from other gastrointestinal lymphoma is it not clearly to be associated with helicobacter pillory. The PCL responds to chemotherapy with good survival rate at 1 and 5 years. The aim of this report is to characterize the symptoms, diagnosis and treatment of PCL.

Case Report: We present the case of a 71-year-old man who was admitted to hospital with a history of acute abdomen with 7-day symptoms unset.

Results: The patient was treated with extended right hemicolectomy for an 8x5 cm perforated tumor with and side-to-side mechanical anastomosis in two plains. Colocation of a port a Cath for chemotherapy, having a no morbidity in post chirurgical and good one-year outcome.

Conclusions: PCL is a rare disease and its diagnosis is difficult in initial stages, usually debut an acute abdomen and has good chemotherapy response.

Keywords: Colon cancer, Primary Lymphoma

1. CASE REPORT

71-year male with 7 days unset of symptoms with colic pain in right iliac fossae, intensity 5/10, no irradiation, mild nausea without vomit previous treatment with antibiotic and pain killers as an infectious gastroenteritis. Personal history of 20-year evolution diabetes type 2 in treatment with Metformin 850mg/ Glimpiride 4mg every 24 hours. At physical a painful 6cm-diameter tumor palpable in right inferior abdomen adhered to deep planes with acute abdomen. His hemoglobin was 15.1 g/dl, leukocyte was 8.4 with neutrophilia of 72%, his Platelet count was 487,000/ μ l, albumin 3.9 mg/dl, Glucose 155mg/dl. The ultrasonography findings are a plastron with slightly augmented vascularity at right iliac fossae.

Surgical resection was performed on the patient. Under sterile conditions initially approach by laparoscopic converted with medial incision, it was found an 8x5 cm petrous perforated tumor

and multiple adhesions Zühlke III, seen in image 1, an extended right hemicolectomy was performed with and side-to-side mechanical anastomosis in two plains. Adequate postsurgical evolution with Enhanced Recovery after Surgery protocol, the patient star chemotherapy within one week with favorable outcome at 6 months follow.



Image1. Perforated tumor

Microscopic analysis seen in image 2. Image A (10x) panmural affection due to lymphoid neoplasia, delimited by wall segments that cut the preservation of its configuration (arrows); presents a superficial ulcer at its apex (asterisk) and bulging in the depth, without rupture of the serosa (arrowheads). Image B (100x) the mucosa looks expanded (arrow) compared to the adjacent unbounded mucosa (arrowhead). Image C (400x) the neoplasm is made up of large cells and are distributed in non-cohesive mantles,

presence of cells with monstrous nuclei (empty arrow); there is nuclear pleomorphism. Image B (600x) are cells that show sarcomatoid morphology (empty arrowhead) while Image E (600x) are plasmacytoid (E, 600 x', empty arrowhead). Through the immunohistochemistry study (not shown), various cells demonstrated diffuse expression of markers that allowed the neoplasm to be classified as a diffuse large-cell lymphoma of line B.

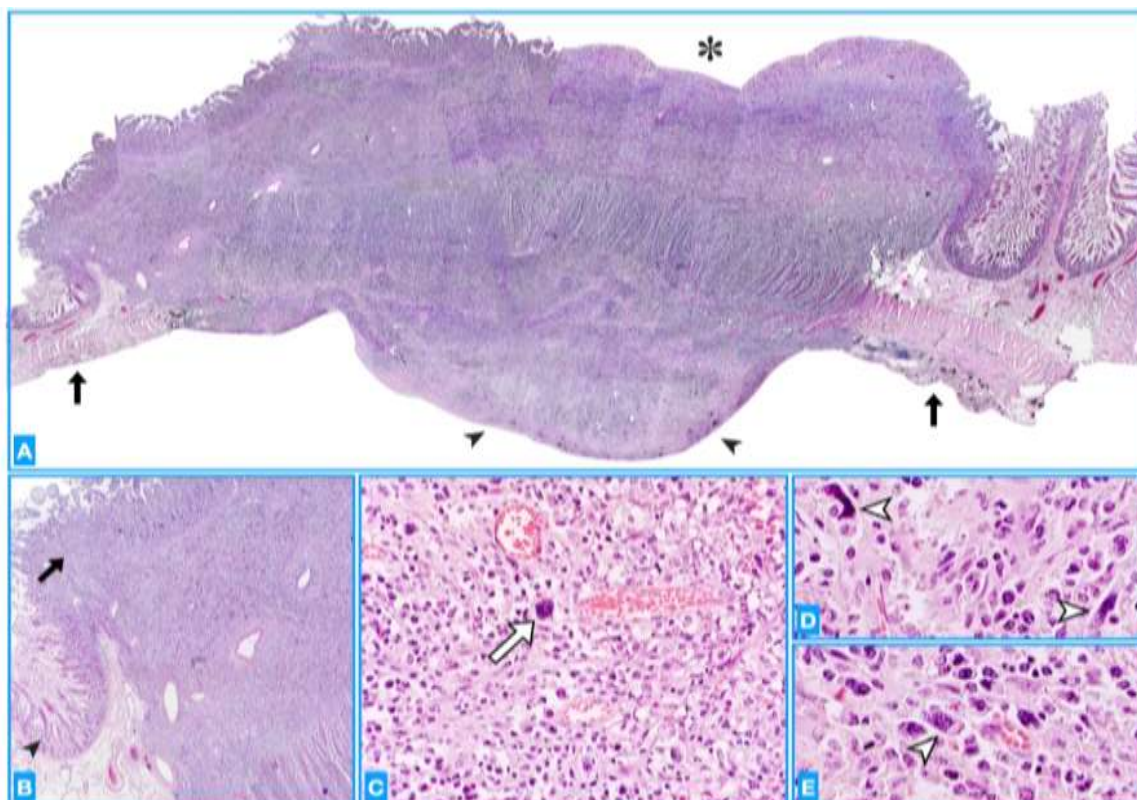


Image2. Microscopic analysis

2. DISCUSSION

Primary Colon Lymphoma represents 0.4% of colon cancer. Constitutes 6%-12% of all gastrointestinal lymphomas (GIL), differently from other GIL is it not clearly to be associated with helicobacter pillory [1], but immunodepression may be an important risk factor [2,3]. The most common type of PCL is B cell Non Hodgkin type as reported by Baireyin a 19 case series, of which 94% and 89% [4] at ileocecal and cecum respectively. The PCL lack of a desmoplastic reaction, because of this, obstruction may not be the primary symptom when having this kind of tumor compared to adenocarcinoma [5]. Most common symptoms are: abdominal pain, weight loss, abdominal mass, and hematochezia [6], whereas obstruction like symptoms would be nausea, vomiting, change in bowel habits [7]

The chemiotactic therapy based on cyclophosphamide, doxorubicin, vincristine and prednisone is consider a treatment first line for PCL and good results are reported when association with surgery [8-10]. Comparing treatment with other GIL surgical resection may be associated with improved survival [11,12]. Based on the PCL staging, initial stages can consider treatment with chemotherapy only [13], usually defined as a tumor with less of 7.5 cm of diameter [14] with low histology grade.

Although great percentage of patients initially presents as acute abdomen, like our patient. One year prognosis is good according to Martin-Domínguez [15] in patients who received chemotherapy with a 100% survival rate posterior to chemotherapy, 75% at 5 years, while the 10 year prognosis was 55%, being 67 years old de mean age of presentation.

3. CONCLUSION

PCL is a rare disease and its diagnosis is difficult in initial stages, usually debut as acute abdomen, with diagnosis made by histology and has good chemotherapy response when association with surgery. The associated age-group comorbidity is bigger than other pathologies. Fortunately, the response to chemotherapy is good for the survival rate in initial stages.

Conflicts of Interest and Funding

None

Ethical Approval

There was no ethics approval required for this case report

Consent

Written informed consent was obtained from the patient for publication of this case report and accompanying images

REFERENCES

- [1] Ghimire P. Primary gastrointestinal lymphoma. *World J Gastroenterol.* 2011;17(6):697.
- [2] Dionigi G, Annoni M, Rovera F, Boni L, Villa F, Castano P, et al. Primary colorectal lymphomas: Review of the literature. *Surg Oncol.* diciembre de 2007;16:169-71.
- [3] Heise W. GI-lymphomas in immunosuppressed patients (organ transplantation; HIV). *Best Pract Res Clin Gastroenterol.* febrero de 2010;24(1):57-69.
- [4] Bairey O, Ruchlemer R, Shpilberg O. Non-Hodgkin's lymphomas of the colon. *Isr Med Assoc J IMAJ.* diciembre de 2006;8(12):832-5.
- [5] Chang ST, Menias CO. Imaging of Primary Gastrointestinal Lymphoma. *Semin Ultrasound CT MRI.* diciembre de 2013;34(6):558-65.
- [6] Tevlin R, Larkin JO, Hyland JMP, O'Connell PR, Winter DC. Primary colorectal lymphoma – A single centre experience. *The Surgeon.* junio de 2015;13(3):151-5.
- [7] Pandey M, Swain J, Iyer HM, Shukla M. Primary lymphoma of the colon: report of two cases and review of literature. *World J Surg Oncol.* diciembre de 2019;17(1):18.
- [8] Pascual, M., Sánchez-González, B., García, M., Pera, M., & Grande, L. Primary lymphoma of the colon. 2013;(Rev Esp Enferm Dig, 105(2), 74-8.).
- [9] Lai Y-L, Lin J-K, Liang W-Y, Huang Y-C, Chang S-C. Surgical resection combined with chemotherapy can help achieve better outcomes in patients with primary colonic lymphoma. *J Surg Oncol.* 1 de septiembre de 2011;104(3):265-8.
- [10] Lightner AL, Shannon E, Gibbons MM, Russell MM. Primary Gastrointestinal Non-Hodgkin's Lymphoma of the Small and Large Intestines: a Systematic Review. *J Gastrointest Surg.* abril de 2016;20(4):827-39.
- [11] Drolet S, Maclean AR, Stewart DA, Dixon E, Paolucci EO, Buie WD. Primary Colorectal Lymphoma—Clinical Outcomes in a Population-Based Series. *J Gastrointest Surg.* octubre de 2011;15(10):1851-7.
- [12] Kim SJ, Choi CW, Mun Y-C, Oh SY, Kang HJ, Lee SI, et al. Multicenter retrospective analysis of 581 patients with primary intestinal non-hodgkin lymphoma from the Consortium for Improving Survival of Lymphoma (CISL). *BMC Cancer.* diciembre de 2011;11(1):321.
- [13] Beaton C, Davies M, Beynon J. The management of primary small bowel and colon lymphoma—a review. *Int J Colorectal Dis.* mayo de 2012;27(5):555-63.
- [14] Gay N, Chen A, Okada C. Colorectal Lymphoma: A Review. *Clin Colon Rectal Surg.* septiembre de 2018;31(05):309-16.
- [15] Martin-Dominguez V, Mendoza J, Diaz-Menendez A, Adrados M, Moreno-Monteagudo JA, Santander C. Colon lymphomas: an analysis of our experience over the last 23 years. *Rev Espanola Enfermadades Dig REED.* diciembre de 2018;110(12):762+.

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