

A Rare Cause of Melena: Duodenal Diffuse Large B-cell Lymphoma

A. Benhamdane, B. Aourarh, S. Berrag, F. Nejari, T. Adioui, M. Tamzaourte

Department of Gastroenterology, Military Hospital Mohammed V, Morocco.

***Corresponding Author:** A. Benhamdane, Department of Gastroenterology, Military Hospital Mohammed V, Morocco.

Abstract

Introduction: Upper Gastrointestinal bleeding is an uncommon manifestation of duodenal diffuse large B cell lymphoma. We report a case of duodenal large B-cell lymphoma presenting with digestive hemorrhage in the form of melena.

Case Report: A 71-year-old women patient, with a history of double mitro-aortic valve replacement in 1994 on anti-vitamin K, viral hepatitis C treated and declared cured, cholecystectomy 2 years ago, admitted for upper digestive haemorrhage with melena. Clinical examination was unremarkable except for pale conjunctiva. Hemoglobin was 5.1; INR 4.4. The rest of the laboratory tests were normal. Fibroscopy revealed an ulcerating, bourgeoning process on D2. Biopsies were performed but were non-specific. Computed tomography showed a duodenal lesional process (D2 and D3), mallimited, heterogeneous, measuring 66x57x66 mm, locally advanced with secondary lymph node and peritoneal localization. CT guided biopsy indicated duodenal B-cell lymphoma. The patient died of her disease.

Conclusion: Digestive bleeding is a rare manifestation of duodenal large-cell B lymphoma. Consequently, early diagnosis has a major impact on prognosis.

Keywords: Diffuse Large B-cell Lymphoma, duodenal lymphoma, Melena

1. INTRODUCTION

Primary lymphoma of the gastrointestinal tract accounts for 1.35% of lymphomas and 5% of gastrointestinal tumours⁽¹⁾. Primary duodenal non-Hodgkin's lymphoma is uncommon and originates in the gastrointestinal tract^(1, 2). Diffuse large B-cell lymphoma is the predominant form, an aggressive lymphoma. Upper gastro intestinal bleeding in the form of haematemesis or melena is an uncommon manifestation in patients with duodenal lymphoma, usually accompanied by severe haemorrhage⁽³⁾.

We report a case of duodenal large B-cell lymphoma presenting with digestive hemorrhage in the form of melena.

2. CASE REPORT

A 71-year-old women patient, with a history of double mitro-aortic valve replacement in 1994 on anti-vitamin K, viral hepatitis C treated and declared cured, cholecystectomy 2 years ago, admitted for upper digestive haemorrhage with melena. Clinical examination was unremarkable except for pale conjunctiva. Hemoglobin was 5.1; INR 4.4.

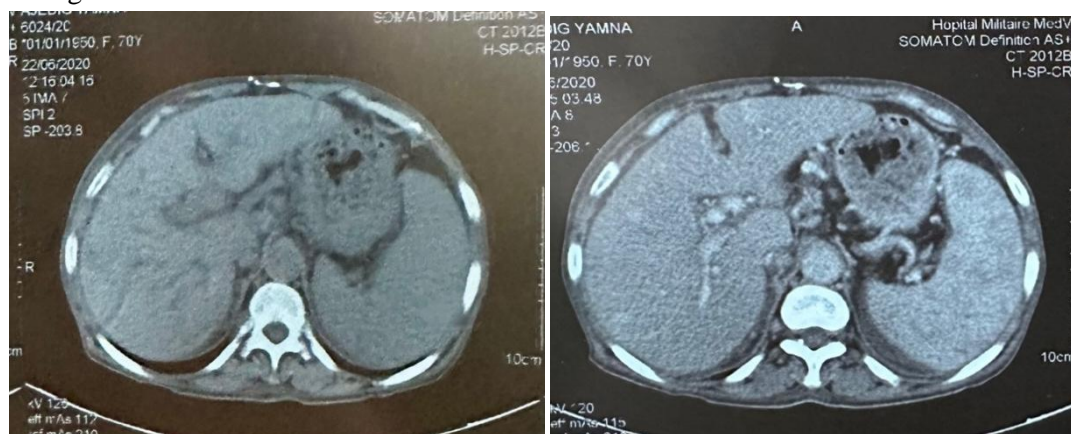


Figure 1. CT scan showing a duodenal lesional process (D2 and D3)

The rest of the laboratory tests were normal. Fibroscopy revealed an ulcerating, bourgeoning process on D2. Biopsies were performed but were non-specific. Computed tomography showed a duodenal lesional process (D2 and D3), mallimited, heterogeneous, measuring 66x57x66 mm, locally advanced with secondary lymph node and peritoneal localization (**Figure 1**). CT guided biopsy indicated duodenal B-cell lymphoma. The patient died of her disease. 3.

3. DISCUSSION

Gastrointestinal lymphoma is a rare tumor, accounting for 1-8% of malignant neoplasms of the gastrointestinal tract⁽⁴⁻⁶⁾.

Diffuse large B-cell lymphoma can occur anywhere in the gastrointestinal tract. Lymphomas of the gastrointestinal tract are difficult to diagnose early because of their non-specific symptoms⁽⁷⁾.

The most common clinical symptoms are vomiting, abdominal pain, weight loss and fever⁽⁸⁾. Digestive haemorrhage such as haematemesis, melena and anaemia are very rare. Bleeding duodenal ulcer is rarely a manifestation of duodenal lymphoma.

The majority of duodenal lymphomas are discovered incidentally during endoscopic examination. They are asymptomatic in the case of low-grade lymphoma, and the clinical manifestation is generally associated with an advanced stage⁽⁹⁾.

The absence of specific symptoms and clinical signs probably explains the delay in diagnosis. In our case, the patient had developed no symptoms other than melena.

Endoscopic examination is useful for assessing gastrointestinal involvement. Ulcerative and protruding lesions are typical of duodenal large B-cell lymphoma⁽¹⁰⁾. In particular, an auricular ulcerated monticulum is characteristic of duodenal large B-cell lymphoma, rarely seen in other lymphomas and cancers⁽¹¹⁾.

Histopathological examination shows diffuse proliferation of large B cells, with KI-67 positivity generally above 40%.

Diagnosis and staging of lymphoma are based on an assessment of the patient's medical history, general condition, and biological and imaging tests. Based on the Lugano classification, CT and PET scans provide crucial diagnostic information⁽¹²⁾. The biological work-up essentially comprises a blood count, serum

LDH, hepatitis B and C and HIV serology, and serum protein electrophoresis⁽¹³⁾.

Large B-cell lymphoma is an aggressive lymphoma, but often responds well to treatment, with long-term remission. The treatment of this type of lymphoma has changed in recent years. Surgery used to be considered the first-line treatment, but is now no longer the preferred option unless emergency surgery is required for perforation or severe hemorrhage⁽¹⁴⁾. Radiation may be an adjunctive treatment in certain cases⁽¹⁵⁾. The most important advance in management has been the administration of rituximab with anthracycline-based chemotherapy, which has significantly improved treatment outcomes⁽¹⁶⁾.

In conclusion, digestive bleeding is a rare manifestation of duodenal large-cell B lymphoma. Consequently, early diagnosis has a major impact on prognosis.

4. DECLARATION OF CONFLICTING INTERESTS

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

5. FUNDING

The author(s) received no financial support for the research, authorship, and/or publication of this article.

6. ETHICAL APPROVAL

Ethical approval is exempt/waived at our institution because the report only has one patient.

REFERENCES

- [1] V. Singh, D. Gor, V. Gupta, A. Jacob, D. Du, H. Eltoukhy, et al., Epidemiology and determinants of survival for primary intestinal non-Hodgkin lymphoma: a population-based study, *World J. Oncol.* 13 (4) (2022) 159–171, <https://doi.org/10.14740/wjon1504>.
- [2] S. Li, K.H. Young, L.J. Medeiros, Diffuse large B-cell lymphoma, *Pathology* 50 (1) (2018) 74–87, <https://doi.org/10.1016/j.pathol.2017.09.006>.
- [3] J.Z. Li, J. Tao, D.Y. Ruan, Y.D. Yang, Y.S. Zhan, X. Wang, et al., Primary duodenal NK/T-cell lymphoma with massive bleeding: a case report, *World J. Clin. Oncol.* 3 (6) (2012) 92–97, <https://doi.org/10.5306/wjco.v3.i6.92>.
- [4] Nakamura S, Matsumoto T. Gastrointestinal lymphoma: recent advances in diagnosis and treatment. *Digestion.* 2013; 87:182–188.
- [5] Freeman C, Berg JW, Cutler SJ. Occurrence and prognosis of extranodal lymphomas. *Cancer.* 1972; 29:252–260.

- [6] Ghimire P, Wu GY, Zhu L. Primary gastrointestinal lymphoma. *World J Gastroenterol*. 2011; 17:697–707.
- [7] Kala Z, Válek V, Kysela P, Svoboda T. A shift in the diagnostics of the small intestine tumors. *Eur J Radiol*. 2007; 62:160–165.
- [8] S.H. Swerdlow, E. Campo, S.A. Pileri, N.L. Harris, H. Stein, R. Siebert, et al., The 2016 revision of the World Health Organization classification of lymphoid neoplasms, *Blood* 127 (20) (2016) 2375–2390, <https://doi.org/10.1182/blood-2016-01-643569>.
- [9] E. Marks, Y. Shi, Duodenal-type follicular lymphoma: a clinicopathologic review, *Arch. Pathol. Lab. Med.* 142 (4) (2018) 542–547, <https://doi.org/10.5858/arpa.2016-0519-RS>.
- [10] Vetro C, Romano A, Amico I, Conticello C, Motta G, Figuera A, Chiarenza A, Di Raimondo C, Giulietti G, Bonanno G, Palumbo GA, Di Raimondo F. Endoscopic features of gastro-intestinal lymphomas: from diagnosis to follow-up. *World J Gastroenterol*. 2014; 20:12993–13005.
- [11] Murakami D, Harada H, Amano Y. Auriculate Ulcers in Gastrointestinal Tract. *Clin Gastroenterol Hepatol*. 2022; 20:A19.
- [12] J.O. Armitage, R.D. Gascoyne, M.A. Lunning, F. Cavalli, Non-Hodgkin lymphoma, *Lancet* 390 (10091) (2017) 298–310, [https://doi.org/10.1016/s0140-6736\(16\)32407-2](https://doi.org/10.1016/s0140-6736(16)32407-2).
- [13] G. Khusnurokhman, L. Wulandari, Mediastinal non-Hodgkin’s lymphoma metastatic to right atrium mimicking right atrial myxoma, *Fol. Med. Indones.* 57 (4) (2021) 345–350, <https://doi.org/10.20473/fmi.v57i4.21031>.
- [14] Y. G. Wang, L. Y. Zhao, C. Q. Liu et al., “Clinical characteristics and prognostic factors of primary gastric lymphoma: a retrospective study with 165 cases,” *Medicine*, vol. 95, no. 31, 2016.
- [15] A. Avile’s, M. J. Nambo, N. Neri et al., “The role of surgery in primary gastric lymphoma: results of a controlled clinical trial,” *Annals of Surgery*, vol. 240, no. 1, pp. 44–50, 2004.
- [16] R.S. Salma, M.P. Sedana, S.U. Yudho, CHOP and R-CHOP therapeutic responses in non-Hodgkin lymphoma patients in Dr. Soetomo General Hospital Surabaya, *Biomol. Health Sci. J.* 1 (2) (2018) 93–96, <https://doi.org/10.20473/bhsj.v1i2.9244>.

Citation: A. Benhamdane et al. A Rare Cause of Melena: Duodenal Diffuse Large B-cell Lymphoma. *ARC Journal of Clinical Case Reports*. 2024; 10(2):1-3. DOI: <http://dx.doi.org/10.20431/2455-9806.1002001>.

Copyright: © 2024 Authors. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.