PRIMARY DUODENAL LYMPHOMA PRESENTING AS UPPER GI BLEEDING: A CASE REPORT

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ABSTRACT

Significance: Primary lymphomas of the GI tract are rare. Their evaluation, diagnosis, management, and prognosis are distinct from that of lymphoma at other sites and other GI tract cancers. Accurate and timely diagnosis may improve the patient's outcome.

Clinical Presentation: A 63-year-old, Filipino, female, hypertensive presented with hematemesis, melena, anemia, and hemodynamic instability.

Management: Emergency EGD showed a giant duodenal ulcer with bleeding visible vessel (Forrest IB Active oozing bleeding). Medical management with proton pump inhibitor, and rebamipide, and enodscopic hemostasis were done. Further work-up revealed diffuse large B cell lymphoma. The patient was referred to medical oncology service, and underwent chemotherapy (R-CHOP).

Recommendation: Bleeding duodenal ulcer as a presentation of duodenal lymphoma is considered rare. Certain endoscopic features warrant suspicious for other etiology for ulcer. Accurate and timely diagnosis is important as primary GI lymphomas are considered as an aggressive malignancy. The best outcome for the patient depends on the early diagnosis and treatment of the disease as these are responsive to chemotherapy.

Keywords: primary duodenal lymphoma; GI bleeding

Introduction

The most common site of extranodal lymphoma is the gastrointestinal (GI) tract, often as secondary involvement. Primary lymphomas of the gastrointestinal (GI) tract are considered to be rare. The most common extranodal site of lymphoma is the stomach followed by the small intestine (1, 2). In the small intestine, the most common site is the ileocecal region, while the duodenum is the least involved (2). Primary lymphomas of the GI tract are clinically significant since its diagnosis, management and prognosis are distinct from that of lymphoma at other sites and other cancers of the GI tract (3). Accurate and timely diagnosis may improve patient's outcome.

GI lymphoma in most patients presents as vomiting, abdominal pain, weight loss, and fever (4). None of these was present in our patient. We present a case of a primary duodenal lymphoma manifesting as upper GI bleeding secondary to a giant duodenal ulcer.

Clinical presentation

A 63-year-old, Filipino, female, hypertensive came in at the ER due to episodes of hematemesis and melena. She was anemic and had hemodynamic instability. Fluid resuscitation was done along with blood transfusion. Physical examination was not significant except for an isolated subcentimeter left cervical lymphadenopathy. Her Blatchford score is 14, and the pre endoscopic Rockall score is 3.

Case Management

Emergency EGD was done which showed a large ulcer with active oozing at the posteromedial wall of the 2nd portion of duodenum (Figure 1A.). Control of bleeding was done using epinephrine injection and endoclips deployment (Figure 1B.).



Figure 1. A. Giant duodenal ulcer with bleeding visible vessel (Forrest IB Active oozing bleeding); B. Post endoscopic hemostasis

After successful endoscopic hemostasis, the patient was maintained on proton pump inhibitor, and rebamipide. Diet was slowly progressed. CT scan with IV contrast of the abdomen (Figure 2.) revealed that the descending duodenum appears heterogeneous with asymmetric wall thickening and enlarged lymph nodes at the subhepatic region around the pancreatic head region measuring 5 x 4.6 x 4.8 cm, 2.9 x 4.4 x 4.5 cm and 4.7 x 4.3 x 2.8 cm (APxTxCC).



Figure 2. A. Descending duodenum with asymmetric wall thickening; B. Enlarged lymph nodes

The patient underwent repeat EGD with biopsy of the ulcer edge on the succeeding hospital stay. Histopathology revealed diffuse large B cell lymphoma, with immunohistochemical staining positive for CD20, CD79A, MUM-1 and with high Ki67 (proliferation index) of 95%. Her LDH is elevated at 572. She was referred to medical oncology service for chemotherapy, and subsequently underwent R-CHOP (rituximab- cyclophosphamide, doxorubicin, vincristine and prednisone) regimen. There was no recurrence of upper GI bleeding.

Discussion

Duodenal ulcer is most commonly due to peptic ulcer disease. Certain endoscopic features that warrants suspicious for other etiology for ulcer, esp malignancy, includes presence of mass lesions, giant ulcer with size > 2cm, presence of nodularity at the edges of the ulcer, or infiltration of the surrounding tissue (5). A high index of suspicion should be present that will necessitate further evaluation.

Several imaging modalities can be used to investigate possible GI lymphoma. The presenting symptoms and appropriate diagnostic modalities would vary depending on the site of involvement. A bleeding duodenal ulcer as a presenting symptom of lymphoma is considered to be rare, and a biopsy of the lesion may give the diagnosis just as presented in this case report. Histopathologically, the most common type of duodenal lymphoma is diffuse large b cell lymphoma (5,6).

Primary GI lymphoma is an aggressive malignancy, with an overall 5-year survival rates is of 47%, 5-year disease-free survival is 40%, and 79% of mortality occurring within the first year of diagnosis (7). Chemotherapy remains to be the most successful treatment for primary GI tract lymphoma cases.

Conclusion:

Bleeding duodenal ulcer as a presentation of duodenal lymphoma is considered to be rare. Accurate and timely diagnosis is important as primary GI lymphomas are considered as an aggressive malignancy. The best outcome for the patient depends on the early diagnosis and treatment of the disease as these are responsive to chemotherapy.

Reference:

- 1. Paryani S, Hoppe RT, Burke JS, et al. Extralymphatic involvement in diffuse non-Hodgkin's lymphoma. J Clin Oncol 1983; 1:682.
- Koch P, del Valle F, Berdel WE, et al. Primary gastrointestinal non-Hodgkin's lymphoma: Anatomic and histologic distribution, clinical features, and survival data of 371 patients registered in the German Multicenter Study GIT NHL 01/92. J Clin Oncol 2001; 19(18):3861-73.
- Castillo JJ, Winer ES, Olszewski AJ. Sites of extranodal involvement are prognostic in patients with diffuse large B-cell lymphoma in the rituximab era: an analysis of the Surveillance, Epidemiology and End Results database. Am J Hematol. 2014 Mar;89(3):310-4.
- 4. Ghimere P, Wu GY, Zhu L. Primary gastrointestinal lymphoma. World J Gastroenterol 2011; 17(6): 697-707.
- 5. Newton E, Versland M, Sepe T. Giant duodenal ulcers. World J Gastroenterol. 2008 Aug 28; 14(32): 4995–4999.
- Morton LM, Wang SS, Devesa SS, et al. Lymphoma incidence patterns by WHO subtype in the United States, 1992-2001. Blood 2006; 107:265.
- Chestovich PJ, Schiller G, Sasu S, Hiatt JR. Duodenal lymphoma: a rare and morbid tumor. Am Surg. 2007 Oct;73(10):1057-62.
- Chandran RR1, Raj EH, Chaturvedi HK. Primary gastrointestinal lymphoma: 30-year experience at the Cancer Institute, Madras, India. J Surg Oncol. 1995 Sep;60(1):41-9.