Lymphoma Presenting As A Bleeding Duodenal Ulcer: A Case Report

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Abstract

We report in the rare case of a 52 year old man who presented to our surgical unit with duodenal mantle cell lymphoma presenting as bleeding duodenal ulcer. Only two cases have been reported worldwide.

INTRODUCTION

Bleeding Duodenal Ulcer (DU) is common and accounts for 33% of upper GI haemorrhage₁. DUs are mostly benign peptic ulcers and, unlike gastric ulcers where biopsy and follow up is mandatory, biopsy of these ulcers is not routine. Uncommon pathologies may however, present at unusual sites and may mimic common conditions. We present a case report of a patient who presented with upper GI bleeding secondary to duodenal mantle cell lymphoma (MCL). Duodenal lymphoma presenting as a bleeding DU is rare and only 2 cases have been reported previously₂ 3.

CASE REPORT

A 52-year-old man was admitted to our hospital through A&E with a history of haematemesis and malaena. The patient was haemodynamically stable on admission. His Hb was 8.2 G/dl. Urgent OGD revealed a 1 cm post-bulbar DU with an adherent clot. Biopsy and urease (CLO) test for H Pylori was positive. He was treated conservatively with blood transfusions, IV PPI and close observation. Next day the patient bled again and repeat OGD showed active bleeding. He was treated by injection sclerotherapy with 1:10,000 adrenaline which controlled the bleeding and his condition stabilised. The next day, however, the patient bled again. At laparotomy he was found to have a large posterior DU which was actively bleeding. The ulcer was underrun and the bleeding controlled. However, the operating surgeon thought the ulcer looked suspicious and biopsied the ulcer edges. A gastrojejunostomy, without vagotomy, was fashioned to facilitate gastric drainage and divert acid from the ulcer.

The patient made an uneventful recovery. Histopathology of

the ulcer edge was reported as cellular malignant tumour infiltrating through duodenal wall from mucosa to serosa. Further immunohistochemisrty revealed a B-cell tumour classified as a mantle cell lymphoma. Blood cell analysis and serology were normal.

After surgery the patient was referred for chemotherapy and received CHOP regimen (six cycles). CT scan of the abdomen 10 weeks later showed 1 cm diameter paraarotic lymphadenopathy at the level of the renal artery.

Following chemotherapy, OGD and CT scan of abdomen revealed no evidence of residual tumour at 30 months.

DISCUSSION

Lymphomas are malignant neoplasms characterised by the proliferation of cells native to the lymphoid tissues, that is, lymphocytes, histocytes, and their precursors and derivatives. Lymphomas are broadly divided into Hodgkin's (HL) and Non Hodgkin's lymphoma (NHL) The GI tract is the commonest site of extra nodal NHL. Of these, 50-60% occur in the stomach and 20-30% in the small intestine. The commonest site in the small intestine is the ileocaecal region and the least common the duodenum₄. GI lymphomas constitute 1-2% of all GI malignancies and the most common lymphoma is the B cell type (>95%)₅. The incidence of lymphoma in the GI tract depends on the amount of lymphoid tissue present in a particular segment.

Alexander reported the first case of duodenal lymphoma in 1877_6 . MCL is one of the subtypes of NHL and accounts for $5\text{-}10\%_7$.

Clinically duodenal lymphoma can present with symptoms

of obstruction in the form of vomiting or early satiety, symptoms of peptic ulceration, bleeding in the form of haematemesis, malaena or anaemia or with non-specific symptoms like weight loss and loss of appetite. Duodenal lymphoma presenting as bleeding DU is rare.

In 1994 the revised European-American classification of lymphoid neoplasm recognised MCL as one of the sub type of NHL₈. Prior to this it was grouped as centrocystic lymphoma in Kiel's classification, intermediately differentiated lymphocystic lymphoma in Rappaport's classification₉ and small cleaved cell lymphoma/small lymphocystic lymphoma in Working's formulation₁₀.

According to Dawson and associates, the following criteria should be met before labelling as lymphoma of GIT₁₁.

- Absence of palpable superficial lymphadenopathy.
- Absence of enlarged lymphnodes in mediastinum on CXR.
- No grossly demonstrable involvement beyond the affected part of the gut and its regional mesenteric lymphnodes at the time of diagnosis
- Normal white cell and differential count.
- Non involvement of liver and spleen. Our case meets all the criteria.

The exact aetiopathegenesis of MCL is not known but cytogenetic analysis shows (t11:t14) (q13:q32) translocation in the majority of cases, which is thought to play key role in the pathogenesis of MCL $_{12}$

Clinically MCL presents at the age of 50-70 yrs, commonly seen in men (men: women = 2:1). The majority are in stage III or IV at the time of diagnosis with bone marrow involvement₁₂. Prognosis depends on the grade and stage of the tumour. MCL is generally incurable and carries median life expectancy rate of 16 to 55 months₁₂. Current modalities of treatment available for mantle cell lymphoma are chemotherapy, monoclonal antibody based therapies and

autologous and allogenic stem cell transplantation₁₂.

CONCLUSION

Though most DUs are benign peptic ulcers, the possibility of other pathologies such as lymphoma should be considered and edge biopsies should be done especially if the ulcer is atypical in appearance or location.

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