A case of Gastrointestinal Lymphoma Presenting as Obstructive Jaundice

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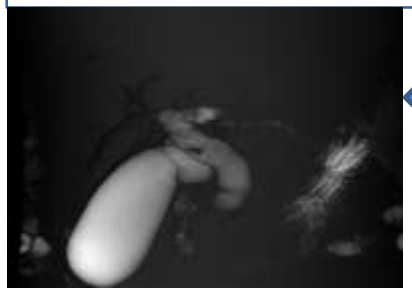
ACG 2022

Introduction

Lymphomas are divided into Hodgkins and Non-Hodgkins lymphoma (NHL). NHL is the Eighth leading cancer by incidence and the ninth most frequent cause of cancer-related death in the US (1). NHL can be nodal or extra-nodal based on the development of the tumor in lymph nodes or a site other than lymph nodes. The incidence of extra-nodal NHL is 25%, however, they tend to involve both lymph nodes and extranodal sites (2). The Gastrointestinal (GI) tract is the most common extra-nodal site accounting for 30-40 % of extra-nodal NHL (3). GI lymphomas are most commonly located in the stomach (65%), followed by small intestine (20%–30%), colon (10%–20%), and esophagus (<1%) (3). GI lymphomas present with various manifestations like nausea and vomiting, loss of appetite, early satiety, the fullness of the abdomen, obstruction, GI bleeding, perforation, and features of malabsorption (5). Rarely, a GI lymphoma can present with obstructive jaundice.

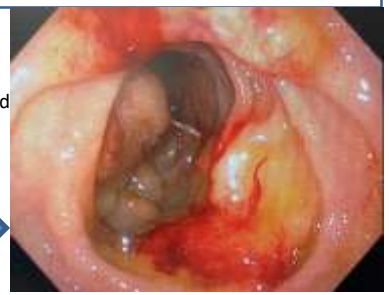
Case Presentation

A 79-year-old woman with a past medical history of HIV on treatment presented with abdominal pain, loss of appetite, and weight loss of 15 kg over a period of one year. Labs showed total bilirubin of 5.6 mg/dl and direct bilirubin of 3.12 mg/dl. Imaging showed dilated CD measuring 1.8 cm, neoplastic mass in the cecum. MRI showed dilated common bile duct and abnormal ampullary area. The patient underwent upper GI endoscopy which showed a mass at the major papilla. Biopsy of the mass is positive for CD45 with Ki-67 80% consistent with Diffuse large B cell Lymphoma (DLBCL). Colonoscopy revealed multiple malignant polypoid lesions in the cecum, ascending colon, hepatic flexure, transverse colon, and rectum with biopsy of all lesions consistent with DLBCL. Immunohistochemical analysis confirms the presence of a malignant B-cell lymphoma diffusely positive for CD20, CD79a, BCL-2, BCL6, MUM-1, and c-MYC with a high Ki and positive for cyclin D1. Bone marrow biopsy showed no evidence of lymphoma. Biliary decompression with a metallic stent was done under CT guidance. Dose adjusted mini-CHOP treatment was administered under close monitoring. Eventually, the patient was deceased due to non-response to therapy and hemodynamic instability.



MRCP showing dilated intra and extrahepatic ducts

A fungating mass around the ampulla



Discussion

GI lymphomas can present with many manifestations but, obstructive jaundice is rare. Our initial suspicion was periampullary carcinoma when we noticed a fungating mass. Colonoscopy revealed multiple masses and various locations, which lead us to consider a differential of carcinoid tumors. However, to our surprise biopsy revealed diffuse large B cell lymphoma and it accounts for only 1-2% of all GI malignancies. Obstructive jaundice occurs in 1-2 % of the cases of non-Hodgkin's lymphoma, which is mostly due to peri-hilar and peri-portal lymphadenopathy. This case is a rare finding due to intraluminal lymphoma causing distal biliary obstruction. Our patient is a rare finding as lymphoma has occurred even after risk of mitigation for HIV. Standard treatment is a combination of chemo-immunotherapy (RCHOP) with excellent survival rates. Without therapy, the survival times are limited to a few months.

Conclusions

We report this case to highlight obstructive jaundice due to GI lymphoma in unusual location. GI lymphoma by itself is uncommon cause of obstructive jaundice and its submucosal location makes this case a rare entity.

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