



Case of gastrointestinal polyposis and cord compression as a consequence of Burkitt lymphoma

Faheemullah Khan^{1*}, Jehanzeb Shahid²

Authors:

^{1,2} Aga Khan University Hospital, Karachi, Pakistan

* Contact: Faheemullah Khan.

faheemullah.khan@aku.edu.

Abstract

Burkitt lymphoma (BL) is a common non-Hodgkin lymphoma that tends to affect the pediatric as well as adult population, and the immunocompromised. It presents with abdominal pain, vomiting, and wall thickening when involving the gastrointestinal tract, but rarely as polyposis. Here we present a 36-year-old male with no significant past medical history who came to the emergency room with neck pain and nausea. Cervical MRI was done which revealed a supraclavicular mass causing cord compression. CT of the abdomen revealed soft tissue polyps along the stomach and small intestine. Endoscopy was carried out which showed large, friable donut shaped lesions within the same areas. Biopsy was taken for those tissues, and the histopathological and Cytogenic findings matched that of Burkitt lymphoma. The patient was started on R-CVP and triple IT therapy before being discharged. He responded well to the treatment and has been stable since.

Introduction

Burkitt lymphoma, a non-Hodgkin lymphoma, is an aggressive lymphoproliferative disorder which falls under the category of high-grade b cell lymphomas (HGBCL), as defined by World Health Organization.¹

Burkitt lymphoma can manifest itself throughout the body, particularly in kidneys, stomach, pancreas, CNS, and bone marrow. 60-80% of sporadic cases arise in the gastrointestinal tract and are associated with nonspecific symptoms such as vomiting and abdominal pain.^{2,3}

Case Presentation

A 36-year-old male with no significant past medical history who came to the emergency room vomiting, abdominal pain, and right sided neck pain radiating to the right arm. Baseline laboratory investigations revealed elevated bilirubin and alkaline phosphatase. Cervical MRI was done which revealed a large mass centered over the right supraclavicular fossa extending into the extradural space resulting in cord compression. A biopsy was taken, which showed neoplastic lymphoid cells and mitotic figures. Cytogenic analysis confirmed c-MYC t[8;14] translocation. Due to abdominal symptoms and back pain, CT of the abdomen was carried out which revealed soft tissue polyps along the stomach and small intestine. Endoscopy was carried out which showed large, friable donut shaped lesions within the same areas. Biopsy was taken for those tissues, and the histopathological and Cytogenic findings matched that of Burkitt lymphoma. The patient was started on R-CVP and triple IT therapy before being discharged. He responded well to the treatment and has been stable since.

Discussion

Gastrointestinal lymphomas cover a broad range of neoplasm, with extra nodal marginal zone B-cell lymphoma (ENMZL), diffuse large b cell lymphoma (DLBCL), and mucosa associated lymphoid tissue (MALT) type lymphomas being the most common. Burkitt lymphoma usually manifests itself in the gastrointestinal tract as an ileocecal mass or diffuse bowel wall thickening, whereas mantle cell lymphoma tends to present with polyposis. Typically, gastrointestinal involvement is seen more in children and young adults as compared to the elderly. On imaging commonly manifests as bowel wall thickening. Burkitt lymphoma presenting as polyposis is quite rare and only reported as case reports. Clinical presentation is not limited to but is commonly presented in the form of nausea, vomiting and abdominal pain as in our case.

Treatment for Burkitt lymphoma can vary according to the presentation, as it is characterized by a high proliferation rate, it responds well to chemotherapy. Advancements in chemotherapy and supportive treatment have led to Burkitt lymphoma being a very curable malignancy. Patient in our case responded well to multidrug chemotherapy.

References

1. Dunleavy, K., Double-hit lymphoma: optimizing therapy. *Hematology Am Soc Hematol Educ Program*, 2021. 2021(1): p. 157-163.
2. Crombie, J. and A. LaCasce, The treatment of Burkitt lymphoma in adults. *Blood*, 2021. 137(6): p. 743-750.
3. Kasparian, S., et al., Recurrent small bowel obstruction caused by Burkitt lymphoma in an elderly man: a case report and review of the literature. *J Med Case Rep*, 2020. 14(1): p. 127.
4. Lewis, R.B., et al., From the radiologic pathology archives: gastrointestinal lymphoma: radiologic and pathologic findings. *Radiographics*, 2014. 34(7): p. 1934-53

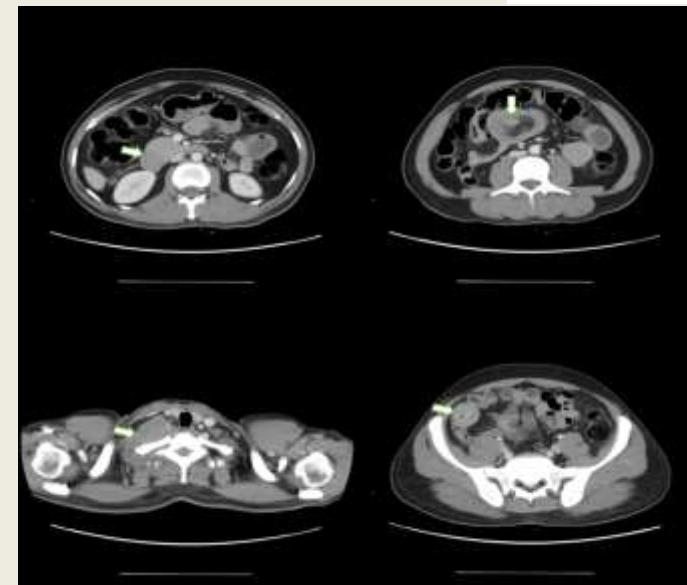


Figure 1. Contrast enhanced CT shows right supraclavicular mass and multiple small bowel polypoidal lesions.