

Burkitt's Lymphoma of Small Bowel – A Case Report

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Abstract: A 15 year old boy was admitted with a history of lower abdomen pain and vomiting for 2 months. On evaluation ct pictures were suggestive of small bowel lymphoma. He underwent laparotomy and found to have tumor arising from ileum, ileal resection and anastomosis was done. Post operative biopsy was consistent with high grade burkitt's lymphoma. Patient was planned for adjuvant chemotherapy. This case is reported for its rarity.

Keywords: Burkitt's lymphoma- cect-resection and anastomosis

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I. Case Report

A 15 year old boy was admitted with history of lower abdomen pain, vomiting, lower abdomen distension for 2 months along with history of malena, loss of weight and appetite. Physical examination revealed lower abdomen fullness and a vague mass in hypogastrium. His vitals were stable. His hemoglobin was 10.2, total count 6000, platelet-3 lakhs. Liver function test, colonoscopy, peripheral smear, bone marrow, chest and abdominal x-ray were normal. He was also negative for hiv and hepatitis b virus. Upper gastro intestinal endoscopy showed oedematous duodenal folds. Contrast ct abdomen showed thickening of ileal loop with maximal thickness of 2.8 cm. This thickened part of the ileum showed features of aneurysmal dilatation and mucosal irregularity with minimal distal flow of contrast noted. These ct findings were consistent with a diagnosis of small bowel lymphoma and the patient was taken up for laparotomy. Intraoperatively 25 cm long exophytic tumor with diffuse involvement of ileal wall 55 cm away from ileocecal junction was present. Liver, spleen were normal. Resection of the involved segment of ileum, with a 10 cm of proximal and distal margin followed by primary anastomosis was done. Post op biopsy and immunohistochemistry showed high grade burkitt's lymphoma with cd-10, cd-20 strong positivity, Bcl 2 negative, Ki 67 index 99%, and lymph nodal showed reactive hyperplasia. Patient is on follow up and is on R- CODOX-M chemotherapy.



Fig 1. Cect Showing Aneurysmal Dilatation

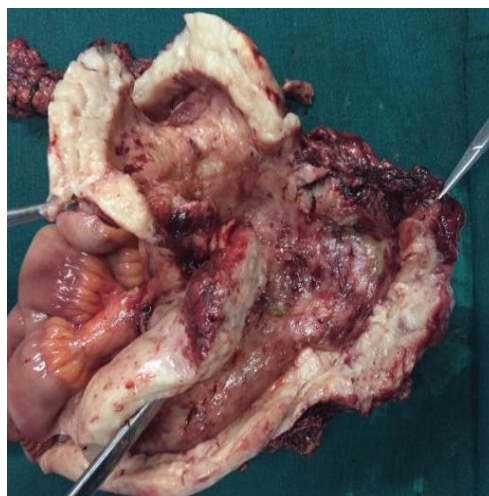


Fig 2. Specimen Of Resected Ileum Of Small Bowel

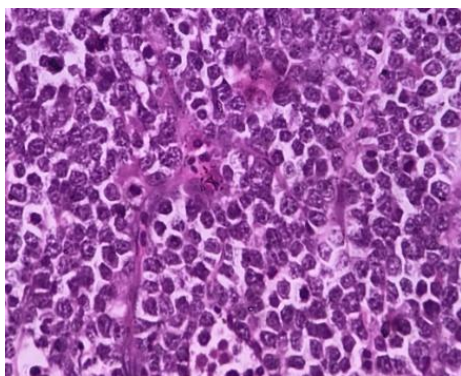


Fig 3. High Power View Of Burkitt's Lymphoma

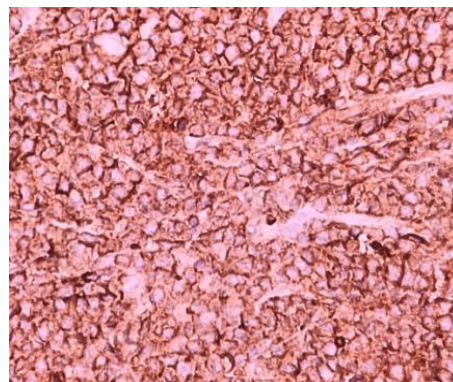


Fig 4. IHC Staining Showing Positivity For CD 10

II. Discussion

Small bowel lymphoma constitutes 5% of all lymphomas(1). Among small bowel lymphomas, burkitt's lymphoma accounts for 5%(2). Small bowel is second most frequent site of gastrointestinal tract involvement by lymphoma next to the stomach. Ileum is the most common site of occurrence as ileum has most lymphoid tissue followed by colon and others. Duodenal is least frequently involved.

In 1958 Dennis Burkitt described burkitt's lymphoma (3). It is usually highly aggressive b cell neoplasm and often presenting in extra nodal sites . It is also the most frequent type of juvenile non hodgkins lymphoma. Usually it occurs in ileum and ileocecal region(2).

It can occur endemically, sporadically or in immunocompromised patients(4). Endemic subtype predominantly seen in central africa. It affects children with peak incidence at 8 years of age, is associated with epstein-barr virus(EBV),malarial infections. It usually affects the facial bones. Sporadic variant occurs in western population; affects a broader age population; often presenting as a mass in waldeyers ring or in terminal ileum. Immunocompromised variant seen in hiv infected individuals.

Burkitts lymphoma may present with abdominal pain, bleeding , intestinal obstruction(4). Usually the symptoms are non specific. This tumor usually grows extramurally and hence the obstruction is usually by direct compression of lumen by the mass or by intussusception by projection of tumor mass. These acute events are the common indications of emergency laparotomy in this subset of patients. 30% - 50% of patients will present with an abdominal emergency.

Small bowel barium series can show luminal narrowing of the involved segment with loss of mucosal pattern and thickening of the plica circularis with intraluminal filling defects possibly with dilatation of the involved segment. Ultrasound may demonstrate a hypoechoic lesion of the affected bowel and presence of abdominal lymphadenopathy. CT scan may show a sausage shaped loop of bowel of relatively homogenous tissue density. Also asymmetric wall thickening of usually greater than 2cm, aneurysmal dilatation, polypoidal mass and abdominal lymphadenopathy can be seen. This aneurysmal dilatation occurs due to replacement of muscularis by tumor or infiltration of myoenteric nerve plexus.

Resection followed by adjuvant chemotherapy or radiotherapy is the treatment. Indications of surgery(5) include, establishing the diagnosis, to stage disease , to relieve obstruction , to prevent perforation , to reduce tumor bulk , to treat peritonitis from perforation. Surgical options are varied ranging from simple biopsy to resection and anastomosis. Surgical resection should be done with 10cm proximal and distal clearance.

Our patient had abdominal pain and distension secondary to the diffuse thickening of intestinal wall due to burkitt's lymphoma. Ct showed the features of aneurysmal dilatation of ileum which is classical of lymphomas. Post operative biopsy was consistent with burkitt's lymphoma.

III. Conclusion

Burkitt's lymphoma of the terminal ileum is very rare. The clinical picture is varied. Preoperative investigations may aid in the diagnosis. Nevertheless, surgical treatment is warranted and histopathology is needed for confirmation of diagnosis, further treatment and for prognosis.

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