Primary Lymphoma of the Small Intestine: Case Report

Dr. Rajeev Sen[1], Dr. Sonia Singh[2], Dr. Padam Parmar[3], Dr.Vinod Kumar[4], Dr.Ashish Sharma[5], Dr.Suman Tomar[6]

ABSTRACT

Primary gastro intestinal (GI) tract lymphomas are rare malignant disorder accounting for only 1-4% of all GI malignancies. Most commonly this lymphoma is usually of B-cell origin but few cases of peripheral T-cell lymphomas of the intestine have been reported in literature. GI tract is the most common extra-nodal site for the development of non-Hodgkin's lymphoma. Large bowel (colon and rectum) are uncommonly involved as compared with the stomach and small bowel. Here we reported a case of primary intestinal Non-Hodgkin lymphoma of small bowel (jejunum).

Keywords: B-cell lymphoma, Non-Hodgkin lymphoma, small bowel, T- cell lymphoma

[1]Professor & Head, [2, 3] Senior Resident, [4,5,6] Junior Resident
Pt. B.D.Sharma, PGIMS, Rohtak – 124001, Haryana, India
Corresponding author mail: dr.soniagulia@gmail.com

Conflict of interest: None

INTRODUCTION

Primary small intestinal lymphoma is uncommon malignancy. Most commonly these lymphoma are usually of B-cell origin but few cases of peripheral T-cell lymphomas of the intestine have been reported in literature, often secondary to a celiac disease.[1] Here we reported a case of primary intestinal Non-Hodgkin lymphoma of small bowel (jejunum).

CASE REPORT

A 49 years old patient presented with left iliac fossa pain of seven months duration colicky in nature. Abdominal pain was not associated with nausea and vomiting and food intake. The past history revealed recurrent abdominal pain with malaise, loss of appetite and weight loss. There was no history of hematemesis, bleeding per-rectum and jaundice. Systemic examinations were unremarkable.

On physical examination, patient was conscious and pale with pulse rate of 68 /min and blood pressure 100/60 mmHg. Local examination of the abdomen revealed a palpable mass of 10x9 cms in left hypochondrium reaching up to left lower umbilical areas with smooth surface, well defined margins and non mobile. Liver and spleen were not palpable clinically.

Ultrasound examination revealed the presence of 6.8x5.7x5.6 cm mass with heterogeneous echogenicity in supraumbilical region. Other laboratory investigations including, biochemical and blood routine tests were all within normal. Contrast enhanced CT of abdomen was advised which showed a hypodense mass in mesentery with heterogeneous enhancement and was enchasing part of superior mesenteric artery. Fine needle aspiration was done under the USG guidance which was non-conclusive due to scanty material.

Laparatomy performed through central midline incision, revealed a 10x10 cms mass arising from small bowel (proximal jejunum) with entrapment of transverse colon and superior mesenteric vessels. Stomach and duodenum loops were dilated. Biopsy was taken from mass along with gastrojejunostomy procedure. Resected tissues were all sent for histopathological examination which showed B-cell lymphoma of intestinal mucosa. Immunohistochemical examination showed LCA and CD 20 positive in tumor cells. The post operative period was uneventful.

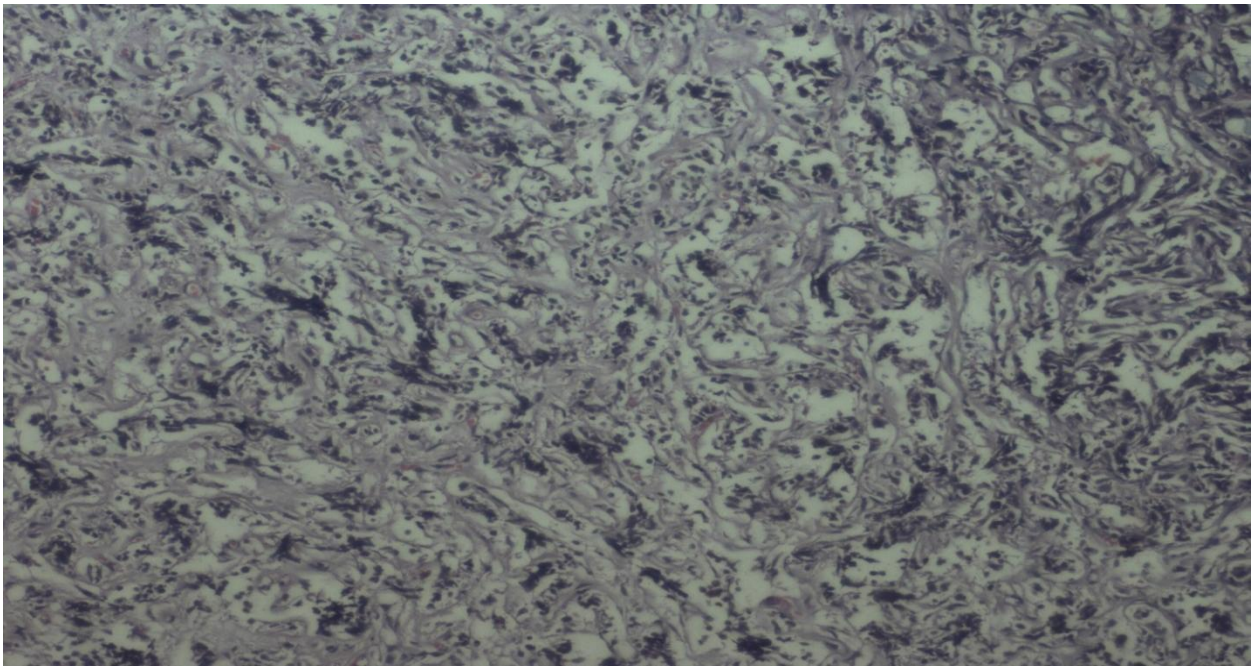

Figure 1: H & E sections showing tumor cells at low power

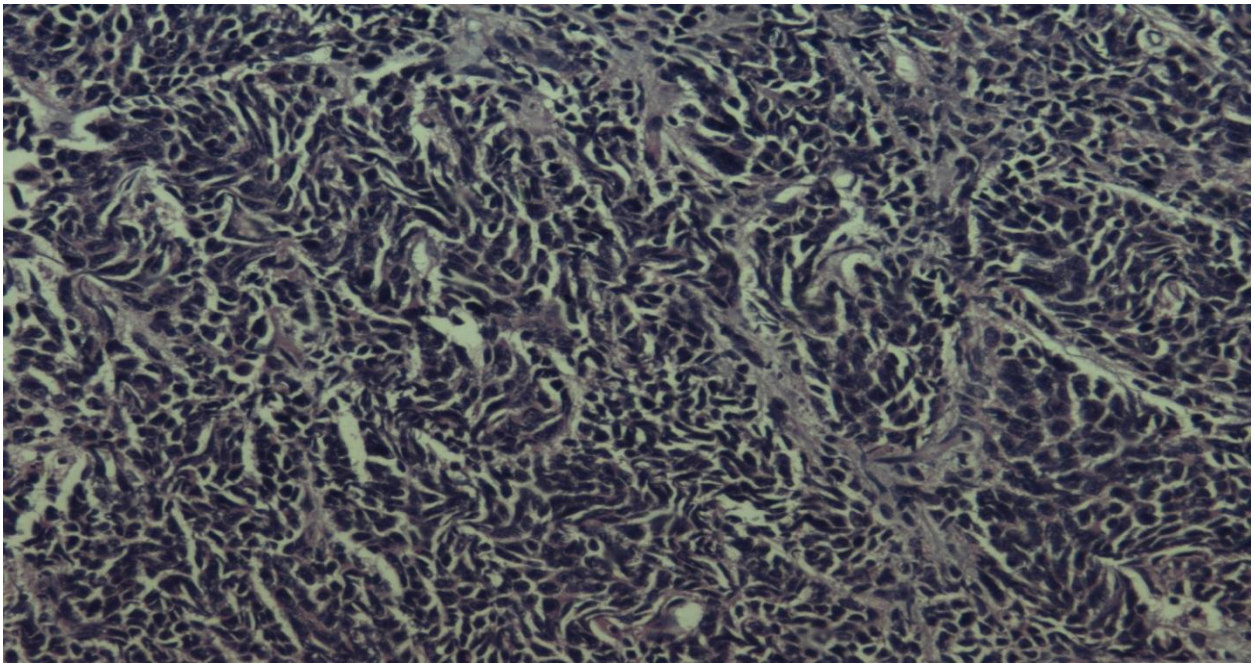

Figure 2: H & E sections showing tumor cells at high power

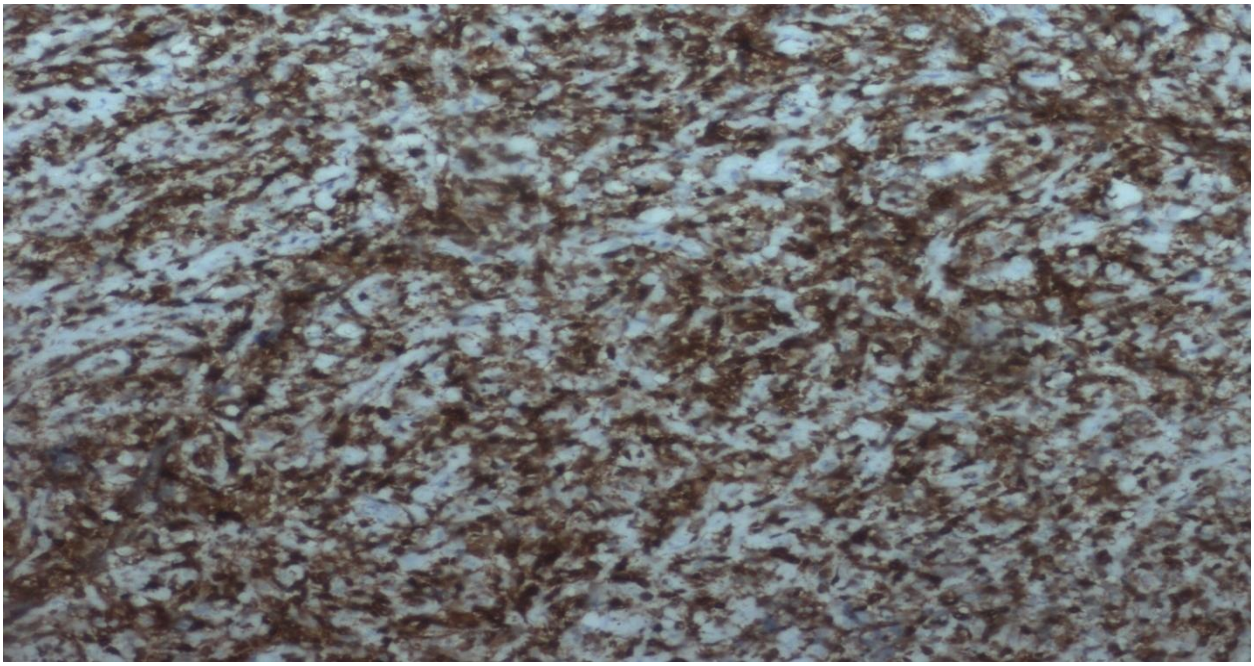

Figure 3: Immunohistochemistry sections revealing tumor cells positive for LCA

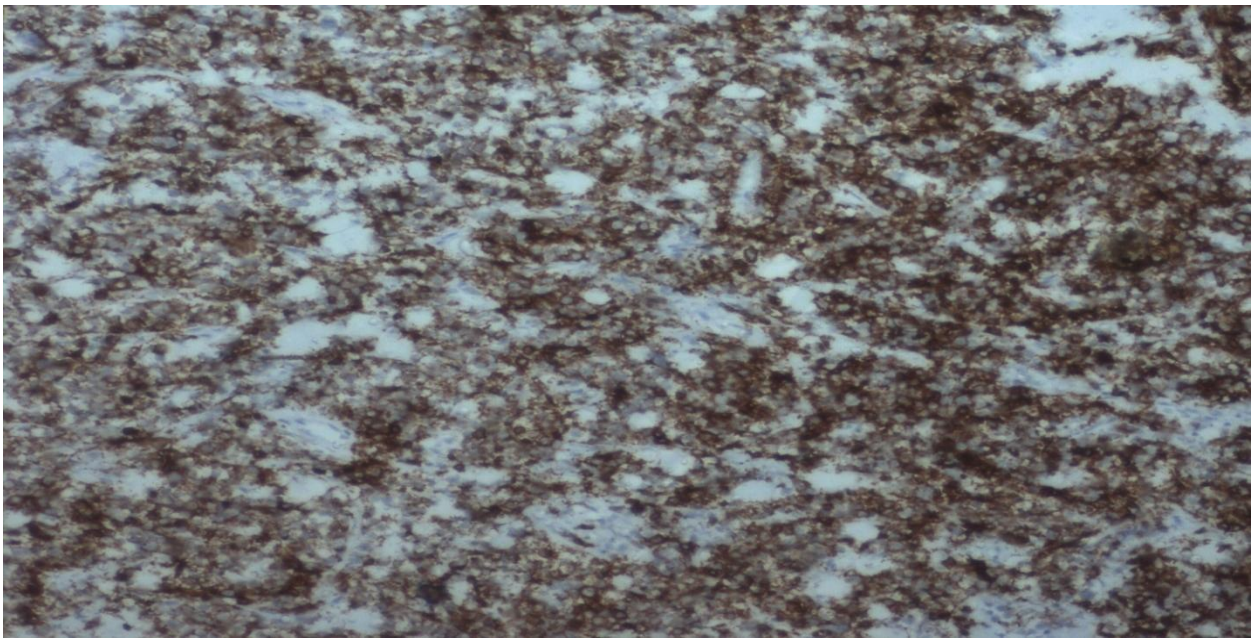

Figure 4: Immunohistochemistry sections revealing tumor cells positive for CD 20

DISCUSSION

Primary gastro intestinal (GI) tract lymphomas are rare malignant disorder accounting for only 1-4% of all GI malignancies. GI tract is the most common extranodal site for the development of non-Hodgkin's lymphoma. Large bowel (colon and rectum) are uncommonly involved as compared with the stomach and small bowel.[2] Most commonly these lymphoma are usually of B-cell origin but few cases of peripheral T-cell lymphomas of the intestine have been reported in literature.

Intestinal T cell lymphomas are classified into enteropathy T cell lymphoma (EATCL), EATCL like lymphoma without enteropathy and non-EATCL type of lymphomas. B-cell malignant lymphoma may present in a variety of forms. These B-cell neoplasms include marzinal zone B-cell lymphoma, immunoproliferative small intestinal disease, follicular lymphoma diffuse large B-cell lymphoma, mantle cell lymphoma and Burkitt lymphoma. The most common primary intestinal lymphoma are follicular B cell lymphomas followed by intestinal T cell lymphomas.[1]

Various diagnostic criteria used for diagnosis of primary intestinal lymphoma. Palpable superficial or mediastinal lymphadenopathy by chest X-ray or by imaging and hepatic or splenic involvement or distant lymphadenopathy by laparoscopy or laparatomy must be absent for diagnosis of primary intestinal lymphoma with normal peripheral blood count and uninvolved bone marrow.[3]

Usually no specific association with a preexisting disease or pathological lesion have been reported for GI lymphomas,. However it has been proposed that lymphomas of mucosa–associated–lymphoid– tissue (MALT) may result from Helicobacter associated chronic gastritis, inflammatory bowel diseases like Crohn's disease and ulcerative colitis is well established.[4]

Histological diagnosis of intestinal lymphoma needs endoscopic biopsy, that must be deep to include the sub mucosal tissue. Immunophenotype and molecular genetics studies make possible to known the histotype type of lymphoma. In fact, the immunophenotype varies between types of

NHL just as it differs between B and T cells at different stages of differentiation.[4,5]

Surgical resection of bowel is important for a correct diagnosis. In case of regional lymph node metastasis, the abdominal radiation thearpy following surgery contributes to improve the duration and the quality of life. In advanced stage patients, multidrug chemotherapy may be neede in form of polychemotherapy includes CHOP (cyclophosphamide, doxorubicin, vincristin and prednisolone) or CHOP-like combination chemotherapy or MACOP-B-like regimens. A chimeric monoclonal anti-CD20, the rituximab have need used for treatment of B cell non-Hodgkin's lymphoma. Now days, the combination of rituximab and chemotherapy is the standard treatment of follicular lymphoma and diffuse large B-cell lymphoma. Rituximab induces programmed cell death by CD20 signal. [4,5]

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