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Case Report

Rare case of mantle cell lymphoma in cecal biopsy

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Abstract

Mantle cell lymphoma is a type of lymphoma that originates from B-cell. It is a rare and aggressive disease with a poor prognosis due to its advanced presentation at diagnosis. They are typically occurs in middle aged or older adults. It shows male predominance, with the M: F ratio up to 7:1. The patients often presents with lymphadenopathy but extra nodal involvement is also common. Gastrointestinal tract may or may not produce symptoms but lymphomatous polyposis involving the ileo-cecal junction is rare manifestation of gastrointestinal lymphoma. Radiologic findings include lymphadenopathy, splenomegaly, multiple polyposis, or wall thickening with ulceration or mass formation. Clinical course is typically progressive with poor response to chemotherapy.

Keywords: Mantle cell lymphoma, Gastrointestinal tract, Lymphomatous polyposis.

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1. Introduction

Mantle cell lymphoma is a type of non Hodgkin's lymphoma. The gastrointestinal tract is the most commonly affected extranodal site, accounting for 5-20% of all lymphoma cases. Stomach is most common site followed by the small bowel and ileo-cecal region. In rare instances, MCL presents a single mass often within the gastric mucosa. Endoscopic features of GI lymphomas are varied including ulcers, erosions, polyps.[1,2] Radiologic findings include lymphadenopathy, splenomegaly, multiple polyposis, or wall thickening with ulceration or mass formation. GI polyposis occurs in up to 10% of cases, including distinctive form known as multiple lymphomatous polyposis.[3] Cyclin D1 overexpression is hallmark feature of mantle cell lymphoma.

2. Case Report

A 56 year old male presented to the gastro medicine department with history of right hypochondriac, lumbar pain and one episode of bleeding per rectum. Radiological examination revealed ilecolic variety of Intussusception in right sub hepatic region- Neoplastic etiology likely. On colonoscopy- sessile colonic polyposis/? cecal malignancy found and cecal biopsy sent for histopathological evaluation. On physical examination no any lymph node enlargement found. His CBC report is as follow Hb-12.8 g/dl, WBC-6620, platelet count 2.71 lakh.

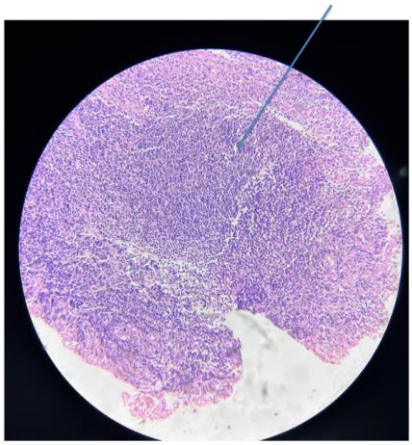

Figure 1: Lymphoid aggregates beneath mucosa [H&E, 10x]

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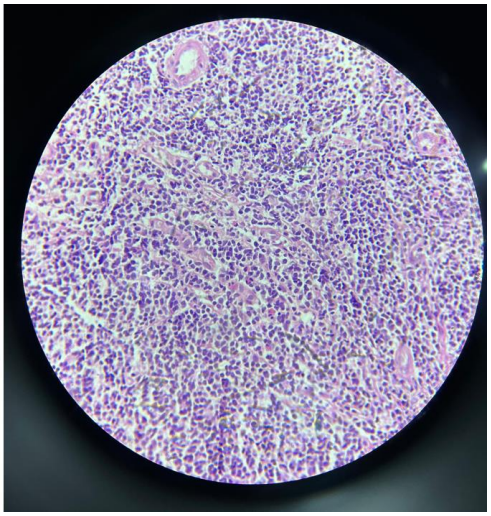

Figure 2: Lymphoid aggregates beneath mucosa [H&E, 40x]

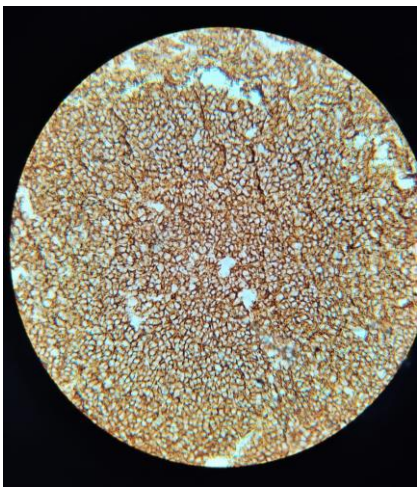

Figure 3: IHC study of CD-20 is positive.

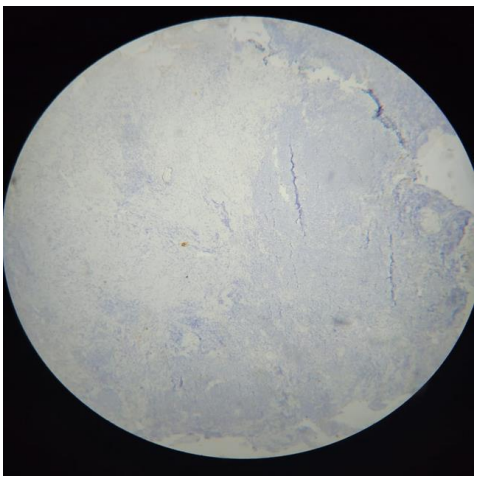

Figure 4: IHC study for pan cytokeratin is negative

2.1. Gross examination

Specimen consist of multiple whitish soft tissue portions measuring 0.7 x 0.2 cm in aggregates.

2.2. Microscopic examination

Section reveals colonic mucosa with mucosal glands and lamina propria. Beneath the mucosa large areas of lymphoid aggregates having monotonous population of small lymphocytes is seen (**Figure 1** and **Figure 2**).

3. Discussion

Mantle cell lymphomas is an uncommon sub-type of non hodgkin's lymphoma accounting for approximately 7% of cases and is associated with a poor prognosis.[4] It can arise from both nodal and extranodal sites. The gastrointestinal (GI) tract is involvement observe in 15–30% of cases.[5] A distinct presentation known as mantle cell lymphoma polyposis (MLP) is occurs in approximately 9% of all GI lymphoma cases. Endoscopic findings in MLP often include cerebroid folding of the gastric mucosa and numerous polyps extending from the duodenum to the large intestine.[6,7] Mantle cell lymphoma (MCL) is defined by a characteristic translocation of the Bcl-1 gene, t(11;14)(q13;q32), which results in cyclin D1 overexpression. This overexpression plays a critical role in cell proliferation and serves as a key hallmark of MCL. Additionally, MCL expresses markers consistent with its B-cell origin, including CD5, CD19, CD20, and CD22.[9] In our case, It shows CD20 positive and pan cytokeratin negative.(**Figure 3** and **Figure 4**) In the majority of cases mantle cell lymphoma is diagnosed at an advanced stage with a 5 year survival rate ranging from 26–46%, even with appropriate treatment.[10]

4. Conclusion

Mantle cell lymphoma (MCL) remains a rare form of non-Hodgkin lymphoma, its incidence is on the rise. Gastrointestinal (GI) involvement, especially in the lower GI tract, is common in MCL. Therefore, gastroenterologists should be well-versed in recognising this condition and understanding the role of endoscopy in its diagnosis and management.

5. Source of Funding

None.

6. Conflict of Interest

None.

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