MANTLE CELL LYMPHOMA OF GI TRACT PRESENTED AS MULTIPLE LYMPHOMATOUS POLYPOSIS: A RARE INTESTINAL MALIGNANCY

Rathod Kirti M¹, Gupta Monica V², Shah Kalpesh H³, Patel Keyuri B²

¹Assistant professor, ²Professor, ³Tutor, Department of Pathology, PS Medical College & Shree Krishna Hospital, HM Patel Centre for Medical Care & Education, Karamsad -388 325. Anand

ABSTRACT

Primary lymphomas arising in the large intestine are less frequent than either gastric or small bowel lymphomas. Primary colorectal lymphomas account for about 0.2% of all neoplasm. Mantle cell lymphoma in form of multiple lymphomatous polyposis is less frequent in colorectum than in the small bowel.2 We present a case of 68 year-old man suffered from abdominal pain and diarrhoea for one year with complain of blood in stool for last 15 days. Multiple polypoid masses were found in the entire colon and caecum on colonoscopic examination. Computerized tomography of the abdomen revealed a large soft tissue mass lesion in caecum and ascending colon with diffuse polypoidal wall thickening involving the transverse colon, sigmoid colon, descending colon with mesenteric lymph node enlargement. Colonoscopic excision of polyp from ascending colon and transverse colon was done. The histological diagnosis was Non-Hodgkin lymphoma with multiple lymphomatous polyposis. In immunohitochemistry, there was positive staining for CD20, CD 5 and cyclin D1 and suggestive of mantle cell lymphoma B cell type. MCL is an aggressive lymphoma, which typically presents in advanced stage; there is often involvement of mesenteric and peripheral lymph nodes, spleen, bone marrow and peripheral blood 6.

Keywords: Mantle cell, lymphoma, polyposis, malignancy, GI track

INTRODUCTION

Primary colorectal lymphomas are uncommon, accounting for only 0.2% of large intestinal malignancies¹. The clinical presenting features are no different from those of primary colorectal cancer.

CASE REPORT

A 68-year-old male patient presented with abdominal pain and diarrhoea since one year. He had complained of blood in stool for last 15 days. He had past history of appendisectomy.

Investigations: Computerized tomography of the abdomen revealed large soft tissue mass lesion in caecum and ascending colon with diffuse polypoidal wall thickening involving the transverse colon, sigmoid colon, descending colon with mesenteric lymph node enlargement. Subsequent colonoscopic examination revealed a large polypoid mass at the cecum, while most of the rest part of the colon were covered with multiple small polypoid lesions (Fig. 1).



Figure 1: Colonoscopic view of polypoidal mass in the colon

Colonoscopic excision of polyp from ascending colon and transverse colon was performed and sent for histopathological examination.

HISTOPATHOLOGY

Colonoscopic excision of polyp from ascending and transverse colon lesions showed nodular proliferation of small to medium sized cells with irregular nuclear outline, indistinct nucleoli and scant amount of cytoplasm. (Fig 2, H & E, 10 x).



Figure 2: Photomicrograph showing tumour nodules straddling the muscularis mucosae and upper

Submucosa: Immunohitochemically positive staining for CD20, CD 5 and cyclin D1.

DISCUSSION

Primary lymphomas arising in the large intestine are less frequent than either gastric or small bowel lymphomas. Primary colorectal lymphomas account for about 0.2% of all neoplasm. Mantle cell lymphoma in form of multiple lymphomatous polyposis is less frequent in colorectum than in the small bowel².

Most of lymphomas occur in older patients without a clear sex predominant. Clinically rectal bleeding is the most common symptom, followed by diarrhoea, abdominal pain, passage of mucus per rectum, constipation, abdominal mass, weight loss, irregular bowel habit and anal pain.

Mantle cell lymphoma present as an isolated mass or as multiple polyps producing the clinical picture of multiple lymphomatous polyposis³. The polyps range in size from 0.5 cm

to 2 cm with much larger polyps found in the ileocaecal region⁴.

The morphology of MCL involving the large bowel is identical to MCL at nodal sites⁵. The architecture is most frequently diffuse, but a nodular pattern and a less common true mantle zone pattern are also seen. Intestinal glands may be destroyed by the lymphoma, but typical lymphoepithelial lesions are not seen. The low power appearance is monotonous with frequent epithelioid histiocytes, mitotic figures and fine sclerosis surrounding small blood vessels. The lymphoma cells are small to medium sized with irregular nuclear outlines, indistinct nucleoli and scant amounts of cytoplasm.

The lymphoma cells are mature B cells and express both CD 19 and CD20. Characteristically the cells co-express CD 5 and CD 43. CD 10 and CD11c are always negative. Bcl-1(cyclin D1) is found in all cases.

Mantle cell lymphoma is characterized by a recurrent cytogenetic abnormality, the t(11,14) (q13;q32). This translocation deregulates oncogene expression of the bcl-1 on chromosome 11. MCL is aggressive an lymphoma, which typically presents in advanced stage; there is often involvement of mesenteric and peripheral lymph nodes, spleen, bone marrow and peripheral blood⁶.

REFERENCES:

- Stacey E Millis, Darryl Carter, Joel K Greenson, Harold A Oberman. Sternberg' Diagnostic Surgical Pathology, 4th edition, 2004, 1582-1587.
- Shephered NA, Hall PA, Coates P J, Levison DA. Primary malignant lymphoma of the colon and rectum. A histopathological and immunohistochemical analysis of 45 cases with clinopathological correlations. Histopathology, 1988; 12: 235-252.
- 3. Weisenburger DD, Armitage JO. Mantle cell lymphoma- an entity comes of age Blood,

1996; 87: 4483-4494.

- Isaacson P , MacLennan KA, Subbuuswamy SG. Multiple lymphomatous polyposis of the gastrointestinsal tract. Histopathology, 1984; 8: 641-656.
- Banks PM, Chan J, Cleary ML, Delsol G, De-wolf-Peeters C, Gatter K, Grogan TM, Harris NL, Isaacson PG, Jaffe ES, et al. Mantle cell lymphoma. A proposal for unification of morphologic, immunologic, and molecular data. Am J Surg Pathol, 1992; 16: 637-640.
- Harris NL, Jaffe ES, Stein H, Banks PM, Chan JK, Cleary ML, Delsol G, De Wolf-Peeters C, Falini B, Gatter KC. A revised European-American classification of lymphoid neoplasms: a proposal from the

International Lymphoma Study Group. Blood, 1994; 84:	PS Medical College & Shree Krishna Hospital
1361-1392	HM Patel Centre for Medical Care & Education
Correpondence:	Karamsad -388 325, Anand, Gujarat.
Dr. Kirti Rathod	E-mail: kirtimr@charutarhealth.org