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Editorial

An unusual presentation of jejunal mass

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ABSTRACT

Primary small intestinal malignancies are rare and accounting for 1-2% of all gastrointestinal (GIT) tumors. Extranodal lymphomas are most commonly found in GIT with majority of sites in stomach, small intestine and ileo-cecal junction. Non-Hodgkin's Lymphoma (NHL) predominantly of B cell type constituting 90% of cases and few are T cell type.
The purpose of this editorial is to highlight the morphology and rarity of T cell lymphoma encountered in jejunum presented with perforation and peritonitis.

We received the excised segment of jejunum with mesenteric nodal mass in a 65-year-old male. He presented to casualty with complain of pain in abdomen since 15 days which was aggravated since 2 hours with not passing stool since 2 days and multiple episodes of vomiting since 1 day. On physical examination patient had guarding and rigidity all over abdomen. On auscultation bowel sounds were reduced. On investigation CBC showed microcytic hypochromic anemia with no e/o atypical cells. Serological and biochemical investigations were within normal limits. X-ray abdomen reveal free gas under the diaphragm. CT abdomen showed circumferential thickening of jejunum? neoplastic etiology.? jejunal GIST with perforation. Emergency exploratory laparotomy was performed. Intraoperative findings showed perforation in the jejunum. Resection and jejunoileal anastomosis was done and specimen sent for histopathology.

We received specimen of jejunum with mesenteric nodal mass. Jejunum (M) 31cm in length, externally shows thickened wall/mass (M) 6cm in length (Figure 1a). On cutting open showed thickened area having gray white luminal thickened wall (M) 1.1cm and thickened mucosal folds, adjacent mucosa appeared unremarkable (Figure 1b). E/S shows area of perforation (M) 1x1cm in diameter at the base of thickened area. In jejunal segment attached mesenteric nodal mass (M) 5.5x5x3.5cm. C/S of nodal mass was well circumscribed, gray white with variegated appearance (Figure 1b). Multiple sections from thickened wall of jejunum show a tumor arising from mucosa and involving all layers of jejunum (Figure 2a). Tumor cells were arranged in diffuse sheets. The lymphoid infiltrate was pleomorphic with continuum of cells from small to large. Individual tumor cells were round, monotonous with round vesicular nuclei, prominent nucleoli and scanty amount of pale eosinophilic cytoplasm. Focally nuclei show lobulation. Few large atypical lymphoid cells with high N:C ratio were also evident (Figure 2b). Sections from mesenteric nodal mass showed effaced architecture of lymph node with paracortical expansion and show tumor cells with similar morphology. Vascular and capsular invasion was noted.

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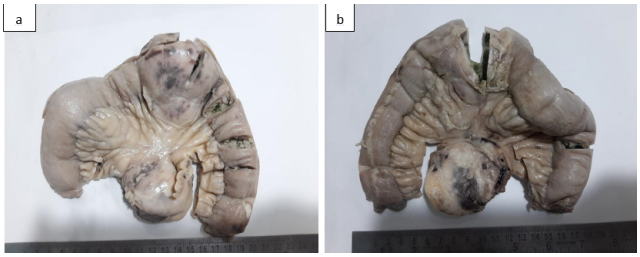

Fig. 1: a: Gross images of resected jejunum with mesenteric mass; **b:** Cut section of jejunum with thickened wall and variegated appearance in mesenteric mass

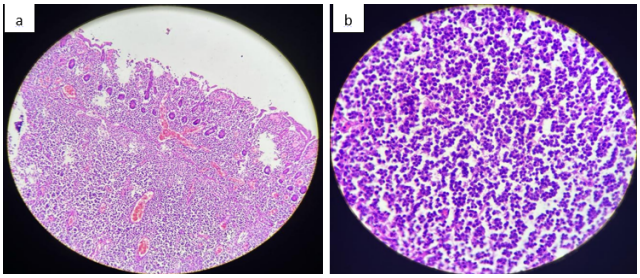

Fig. 2: a: Light microscopy of jejunal tumor arising from mucosa and infiltrating the deeper layers (H&E,x100); **b:** Monotonous lymphoid tumor cells with few polymorphous cells with atypical nuclei (H&E,x400)

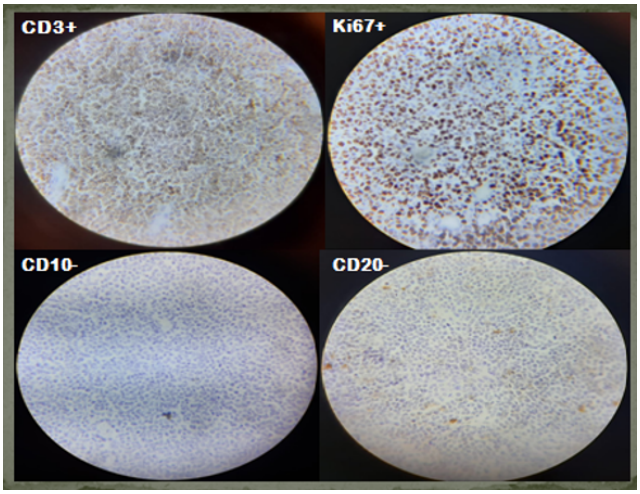

Fig. 3: Tumor cells immunopositive for CD 3, ki 67 and immunonegative for CD10 & CD20

Histopathological diagnosis was given as Non Hodgkin's Lymphoma (Extranodal lymphoma) – S/O MALT lymphoma Jejunum with mesenteric nodal mass with both peripheral surgical margins of jejunum and omentum were free from tumor. Vascular invasion +, Capsular invasion present +. The blocks were sent for ancillary diagnosis. The lymphoid cells are immunopositive for CD3, Ki67. Immunonegative for CD5/CD10/CD20 (Figure 3).

The final diagnosis was offered as Peripheral T Cell Lymphoma (High grade) – jejunal mass.

Primary malignant tumor of small intestine are very rare accounting for 1%-2% of all GI malignancies.[1] Lymphoma constitutes 15%-20% of all small intestinal neoplasm and 20%-30% of all primary gastrointestinal lymphomas.[2] Ileum is most common site (60%-65%) followed by jejunum (20%25%).[3] Almost 90% of the primary gastrointestinal lymphomas are of B cell lineage and very few T cell lymphoma.[4]

Primary small intestine lymphomas that are more heterogeneous than those in stomach include MALT lymphoma, DLBCL, MCL, follicular lymphoma and immunoproliferative lymphoma and can be divided into immunoproliferative small intestinal disease (IPSID).[4] Lymphoma primarily located in the small intestine usually warrants laparotomy with the affected segment removed both for its diagnosis and treatment.[2]

The aim of the editorial is to highlight the peripheral T cell lymphoma of jejunum as very rare entity most commonly presented with perforation and peritonitis.Surgical resection and chemotherapy / R-CHOP are main treatment modalities with limited outcomes in GI lymphoma.[4] Due to its grave prognosis clinical suspicious, histopathological and ancillary/IHC studies are mandatory for accurate diagnosis.

Conflict of Interest

None.

References

1. Ghimire P, Wu GY, Zhu L. Primary gastrointestinal lymphoma. *World J Gastroenterol*. 2011;17(6):697–707. doi:10.3748/wjg.v17.i6.697.
2. Schottenfeld D, Beebe-Dimmer JL, Vigneau FD. The epidemiology and pathogenesis of neoplasia in the small intestine. *Ann Epidemiol*. 2009;19(1):58–69. doi:10.1016/j.annepidem.2008.10.004.
3. Li B, Shi YK, He XH, Zou SM, Zhou SY, Dong M, et al. Primary non-Hodgkin lymphomas in the small and large intestine: clinicopathological characteristics and management of 40 patients. *Int J Hematol*. 2008;87(4):375–81. doi:10.1007/s12185-008-0068-5.
4. Al-Saleem T, Al-Mondhiry H. Immunoproliferative small intestinal disease (IPSID): a model for mature B-cell neoplasms. *Blood*. 2005;105(6):2274–80. doi:10.1182/blood-2004-07-2755.

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