Original Research Paper

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PLASMABLASTIC LYMPHOMA MASQUERADING AS SUBACUTE INTSESTINAL OBSTRUCTION IN A HIV-POSITIVE PATIENT

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ABSTRACT Plasmablastic lymphoma (PBL) is a rare but aggressive neoplasm that arises from post germinal center B cells. It is more common in patients infected with human immunodeficiency virus (HIV) and the most common site is oral cavity1. Recent data suggest that these tumors are now seen in many extra-oral sites such as the gastro-intestinal tract. We report a case of 44 year old male who presented with features of acute intestinal obstruction. On further evaluation he was found to have plasmablastic lymphoma of the ileum that showed diffuse positivity for CD138.

KEYWORDS

Lymphoma, HIV, plasmablastic lymphoma.

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Case report :

A 44 year old male patient came with complaints of pain abdomen localised to epigastric region for 2 weeks, continuous, dull aching pain, with no specific aggravating or relieving factors and of vomiting for past 10 days, foul smelling vomitus, consisting of ingested food particles, bilious, non blood stained and was aggravated since past 2 days, approximately 15 episodes/day. Patient also had complaints of abdominal distension for one day and was diagnosed to have acute intestinal obstruction.

Patient was a known case of tuberculosis on ATT, a known case of chronic hepatitis B and was subsequently diagnosed to be retropositive and was undergoing treatment. On examination, his vitals were within normal limits. Per abdomen examination revealed abdominal distension with diffuse tenderness and bowel sounds were hyperperistaltitic.

CECT whole abdomen was done and showed multifocal areas of arterially hyperenhancing lesion/wall thickening in the ileum with ileoileal intussusception secondary to one of the lesion with proximal ileal loops dilatation and distal loops collapsed. Mesenteric lymphadenopathy was also seen.

Patient underwent emergency small bowel resection and anastomosis. Intra-operatively two areas of small bowel intussusceptions were noted. One was 120-150 cm from DJ flexure and the other was 20cm distal to the 1st one and the lead point of the intussusception being a mass in the bowel loop. Another tumour of size 3x2cm was seen 20cm proximal to ileocecal junction. Multiple necrotic lymph nodes were noticed. Segmental resection of ileum and ileoileal anastomosis. The resected segment of small bowel was sent for histopathological examination.

Grossly we received two portions of small bowel with a total of 3 lesions, largest measuring 5 x 5 x 0.5 cm. Microscopic examination of the lesion revealed a normal small intestinal mucosa with submucosa showing monotonous population of tumor cells having starry sky pattern infiltrating upto the serosal layer. The individual tumor cells were plasmacytoid and intermediate sized with moderate amount of amphophilic cytoplasm, round to oval eccentrically placed nuclei having irregular nuclear membrane and two to three prominent nucleoli. The tumor cells were positive CD138 and MUM1 with Ki67 labelling index of 95%. Other markers such as CD45, CD3, CD20, CD10 and BCL2 were negative.

Figure 1 : Gross image of the ileal lesion.

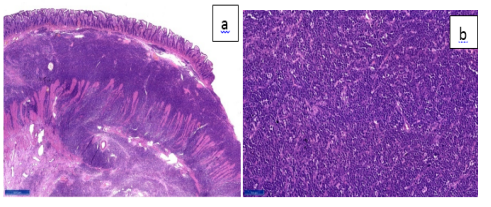

Figure 2 : (a) Low power and (b) high power view of the submucosal lesion showing plasmacytoid tumor cells with starry sky pattern.

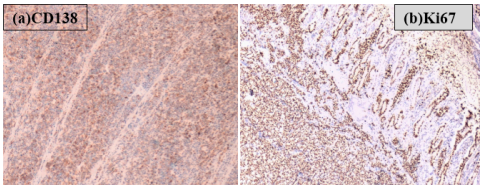

Figure 3 : Immunohistochemical stain showing positivity for (a) CD138 and high proliferative index for (b) Ki-67

Discussion

Delecluse et al first described the entity "Plasmablastic lymphoma" that was found to be in association with HIV positive cases primarily in the oral cavity5. Recent literature has evidences that these tumors are on the rise in extra-oral sites such as in the gastro-intestinal tract, skin,

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subcutaneous tissue, and lung6. Only a limited number of cases have been reported in the small intestines 3,7. Our case had tumor in the ileum as well as in the jejunum.

The differential diagnosis of HIV-associated lymphomas in gastro-intestinal tract includes Burkitt lymphoma, diffuse large B cell lymphoma (DLBCL), classical Hodgkin lymphoma, extrapleural primary effusion lymphoma and rarely plasmablastic lymphoma. Plasmablastic lymphomas account for only 2 % of the cases of HIV associated lymphomas affecting middle aged men with most common site being the oral cavity. Immunophenotypically these tumors are positive for plasma cell markers such as CD138, CD38, MUM1, CD79a and are negative for CD20 . This staining pattern helps in differentiating these tumors from the plasmacytoid variant of other HIV associated tumors mentioned before 2.

Many of these tumors are found to be positive for MYC gene rearrangement with the partner genes being the Ig4. MYC rearrangement was not done in our case because of financial constraints.

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