



Extra-Nodal Diffuse Large B-Cell Lymphoma Presenting as Abdominal Mass: A Case Report

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Abstract

Lymphoma is a common malignancy and about 40% cases present as extra-nodal lymphoma in certain organs like gastrointestinal tract and skin. Primary extra-nodal manifestation presenting as mass on abdominal wall is a rare condition. There are very few case reports on abdominal wall lymphoma. Diffuse large B – cell lymphoma is the most common type of non-Hodgkin`s lymphoma found on abdominal wall. We are presenting a case of 66year old lady with IHC proven diffuse large B-cell lymphoma on abdominal wall. Patient has received four cycles of chemotherapy (rituximab, cyclophosphamide, doxorubicin, vincristine and prednisolone). Immunohistochemistry is important to establish the diagnosis.

Keywords: NIL

INTRODUCTION

Lymphoma is the seventh most common malignancy in world. The percentage of all non-Hodgkin`s lymphoma coded as being of extra-nodal region is between 25-35%, with stomach skin and small intestine being the most common extra nodal sites. DLBCL is the most common type of NHL found in abdominal wall and it affects both osseous and soft tissues. The incidence increases with age, occurring in 7th to 8th decade of life. The aetiology remains unknown and immune deficiency is a risk factor. In this case report we outline the diagnosis and management of DLBCL which presented as soft tissue swelling on abdominal wall.

CASE REPORT:

A 66-year-old lady presented to our hospital with complaint of swelling on anterior abdominal wall for past 4 months. She had pain in the swelling with no history of any other swelling on her body and no history of fever, weight loss and night sweats. She had no family history of malignancies in her first degree

relative. Physical examination revealed a 4×4cm nodular swelling in left iliac fossa, rest of her per abdominal examination was normal. She had no palpable lymphadenopathy. Fine needle aspiration cytology revealed amelanotic melanoma / poorly differentiated carcinoma.

Patient was reviewed in our department and was suggested excisional biopsy from the lesion. Histopathology revealed poorly differentiated malignant tumor (fig-1). Immunohistochemistry showed high grade B cell non-Hodgkin lymphoma favouring diffuse large B cell lymphoma. IHC markers CD45, viamentin, CD20, Ki-67, BCL-2, MUM-1, C-myc were immune-reactive(. PET-CT showed ill-defined soft tissue nodule arising from the lesser curvature of the stomach with standard uptake value of 9.209, circumferential mural thickening involving jejunal loops, hypermetabolic soft tissue nodule on the anterior abdominal wall measuring 4.4×4 cm and another in the anterior compartment of left thigh. Bone marrow examination revealed normal examination.

She was started on chemotherapy after routine blood investigations and 2D- ECHO. All the four drugs, rituximab, cyclophosphamide, doxorubicin, vincristine, and prednisolone were delivered on the same day and repeated after 21 days. Till now patient had completed four cycles of chemotherapy and symptomatically better. She is planned for review PET-CT after six cycles of chemotherapy.

DISCUSSION:

Lymphomas are histologically heterogenous group of neoplasms which arise from the cells of immune systems and it represents about 5% of all cancers 1. Non-Hodgkins lymphoma may involve any organ of our body. The term extranodal is used to describe the neoplastic proliferation of lymphoid tissues other than the expected native lymph nodes or lymphoid tissue 2. The percentage of extra nodal lymphomas is between 25-35% 3. The most common extranodal sites of involvement are stomach, spleen, Waldeyer ring, central nervous system and skin. Lymphomatous involvement of soft tissue has been reported to occur in 1.4% of cases with 0.3% in Hodgkin lymphoma and 1.1% in non-Hodgkin lymphoma 4. Diffuse large B cell lymphoma is the most common type of soft tissue lymphoma 5.

Clinical features of extra-nodal lymphoma manifest according to the site of involvement. Patients with GI

tract involvement may manifest as difficulty in eating and sharp weight loss. Patients with cutaneous lymphoma may manifest with mycosis fungoid. Primary extremity lymphoma may present as pain and swelling in ipsilateral lymphoma. Thus it can be said that primary lymphoma do-not manifest as typical lymphoma symptoms 1,6 . our patient presented with mass on the anterior abdominal wall and was not accompanied with constitutional symptoms like fever weight loss and night sweats. Fine needle aspiration cytology was suggestive of poorly differentiated carcinoma in our patient. Core needle biopsy is an important diagnostic method for excluding potential malignancy or obtaining histological sample in a known malignancy usually lymphoma 7. Biopsy is also helpful as it offers tissue for immunohistochemical examination.

RCHOP based chemotherapy is commonly the first choice in the treatment of lymphoma. RCHOP has shown to improve response rate and prolonged event free and overall survival in elderly patients of DLBCL with marked increase in toxicity 7.

Primary abdominal lymphoma is a rare manifestation of extra-nodal lymphoma. Its atypical clinical and imaging characteristics makes it diagnosis difficult. Core needle biopsy is essential for diagnosis. Prompt diagnosis and start of chemotherapy is important for the cure of disease.

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FIGURE LEGENDS:

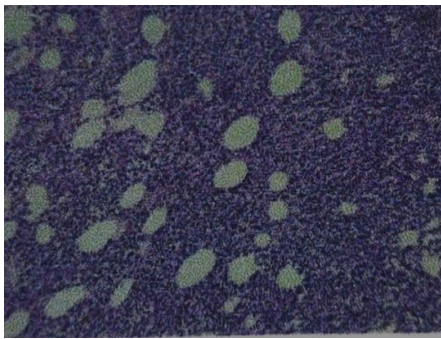


Fig-1 HPE image of biopsy specimen showing round to polygonal cells

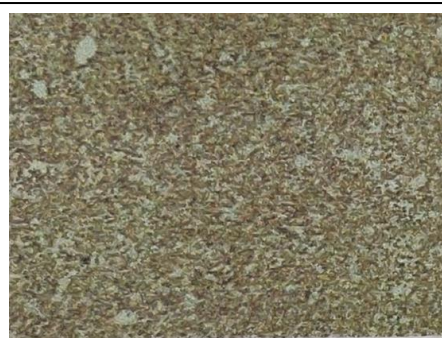


Fig 2 IHC staining positive for BCL-2



Fig-3 IHC stain positive for CD20



Fig-4 IHC staining positive for c-myc

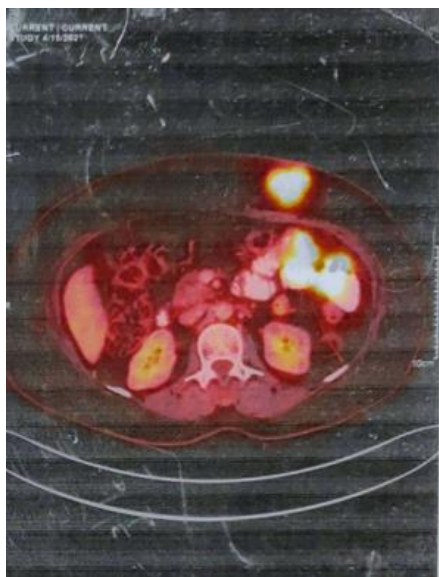


Fig -5 PET-CT image showing hypermetabolic soft tissue nodule on the anterior abdominal wall and on the lesser curvature of stomach