ORIGINAL ARTICLE

Primary thyroid lymphoma: A tumor which melts on treatment!

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A 28 year old lady with no significant past history presented with a rapidly growing swelling over the neck, for a duration of 2 months. There was no pain over the swelling. No history suggestive of hyper/ hypothyroidism or compressive symptoms. On clinical examination, there was a hard, smooth surfaced swelling measuring 4x4 cm on the right side of lower neck, which moved upwards with deglutition. Trachea was shifted to the left. There were no palpable cervical lymph nodes. Rest of the examination was essentially normal.

Contrast enhanced CT of the neck revealed a homogenously enhancing lesion; measuring approximately 3.6x2.3 cm is noted in the right lobe and isthmus of thyroid (Figure 1). The lesion was abutting and displacing right internal jugular vein, right common carotid artery and sternocleidomastoid muscle. Trachea was compressed and shifted to left with maintained fat planes. Fine needle aspiration cytology revealed numerous small to medium sized cells with round nuclei, fine granular nuclei, inconspicuous nucleoli and scant cytoplasm, consistent with non-Hodgkin's lymphoma. Diagnosis was confirmed with core tissue biopsy and immunohistochemistry which showed positivity for LCA, CD 20 and CD 3. Bone marrow studies and imaging of chest and abdomen did not reveal any abnormalities/ metastases.

The patient was diagnosed with stage IE non-Hodgkin's lymphoma (Diffuse B cell type) of thyroid and was started on R-CHOP chemotherapy regimen as per NCCN guidelines. After one cycle of chemotherapy, the lesion the lesion completely regressed (Figure 2).

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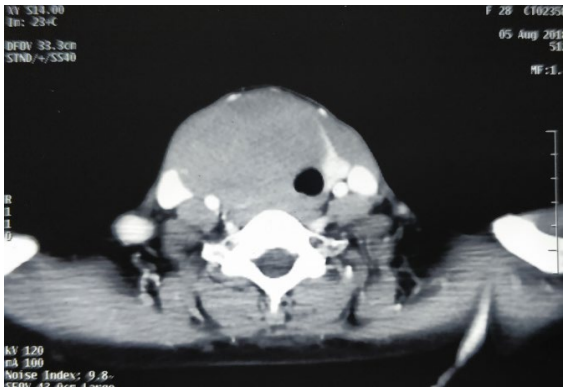

Figure 1

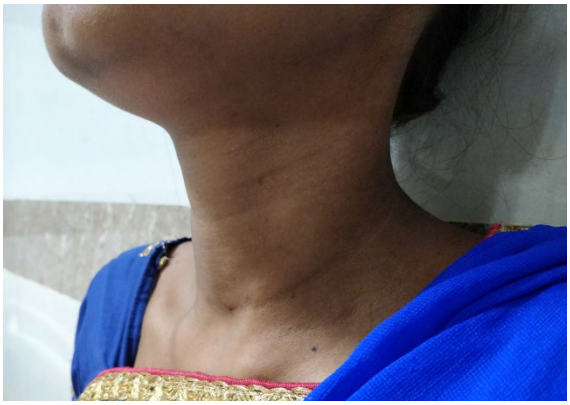

Figure 2

DISCUSSION:

Primary thyroid lymphoma (PTL) is a rare disorder of the thyroid gland, accounting for 2-5% of all thyroid gland neoplasms and less than 2% of all lymphomas[1]. Non- Hodgkin's lymphoma is the most common type and more than half of these are diffuse large B-cell type. Women have a higher predilection for developing the disease (M: F = 4:1) and is more common in 6th and 7th decades of life. Up to 90% of all patients with PTL can be associated with Hashimoto's disease [2]. Hence the pathogenesis is proposed to be related

to the stimulus of long-standing chronic inflammation.

Clinical presentation is in the form of a rapidly growing mass with occasional pain. Compression symptoms like dyspnea, dysphagia, stridor, aphonia and cough can be associated. Systemic manifestations (B-symptoms) like fever, nocturnal perspiration and weight loss can be seen in 10-20% cases of thyroid lymphoma. The role of fine needle aspiration cytology in the diagnosis of PTL is limited by the difficulty of establishing a differential diagnosis between lymphoma and lymphocytic infiltration due to thyroiditis[3]. Immuno-molecular studies after core needle biopsy will help in establishing the diagnosis[1]. Imaging of the chest and abdomen with a bone marrow aspiration study will aid in the staging of the disease. Although surgery was used in the treatment of PTL initially systemic chemotherapy (R-CHOP regimen) is now the preferred treatment of choice, with the development of effective chemotherapy regimen[2]. Radiation therapy can be used for consolidation or as primary modality in indolent tumors.

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