



**ORIGINAL RESEARCH PAPER**

**General Surgery**

**A CASE OF PRIMARY THYROID LYMPHOMA**

**KEY WORDS:** Thyroid Lymphoma, Diffuse large B-cell lymphoma, PTL

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**ABSTRACT**

Primary Thyroid lymphoma is a rare type of thyroid malignancy. Patients with Hashimoto's thyroiditis are at a greater risk of developing Primary thyroid lymphoma (PTL). Chemotherapy and Radiotherapy are the mainstay of treatment of PTL. Though the role of surgery is limited in the management of primary thyroid lymphoma, large tumour leading to compression symptoms and airway compromise, might be relieved by thyroidectomy. Here we present a case of a 60 year old female patient, presenting with rapidly enlarging mass in front of the neck for past 20 days. She also had history of dyspnoea, dysphagia and hoarseness of voice. On examination, she had a thyroid swelling of size about 15cm x 10cm, tracheal deviation towards right and stridor. After evaluation, she was found to have Primary Thyroid Lymphoma and based on her clinical condition, we proceeded with total thyroidectomy.

**INTRODUCTION**

Primary thyroid lymphoma (PTL) is a rare disease, seen mostly in older women, whose presenting symptoms include rapidly enlarging painless mass in the neck. It is often associated with hoarseness of voice, dyspnea and dysphagia. The risk of developing PTL is about 60 times higher in patients with Hashimoto's thyroiditis than normal people. Most of the tumours are B-cell derived Non-Hodgkin's Lymphoma. Ultrasound guided Fine Need Aspiration Cytology or Core needle biopsy will aid in the diagnosis. Large tumour with compression symptoms should be monitored for airway compromise and if needed emergency tracheostomy or Endotracheal intubation should be performed at the earliest. Initiation of steroids will help in reducing the size of the tumour and reducing symptoms. Early tissue diagnosis and Chemoradiation therapy are the cornerstone of treatment. Surgery is only indicated for severe compression symptoms. Emergency tracheostomy or Total thyroidectomy might be needed to relieve the symptoms if there could be a delay in the tissue diagnosis and initiation of chemo radiotherapy.

**Case Report**

A 60 year old female presented with complaints of swelling in front of the neck, associated with dyspnoea, dysphagia, hoarseness of voice and noisy breathing. The swelling was sudden in onset and progressed rapidly to a size of 15cm x 10cm in 20 days. She had no features of hyperthyroidism or hypothyroidism. She had no swellings anywhere else in the body. She was not a known case of Hashimoto's thyroiditis and not on any thyroid medications. She had no other comorbidities.

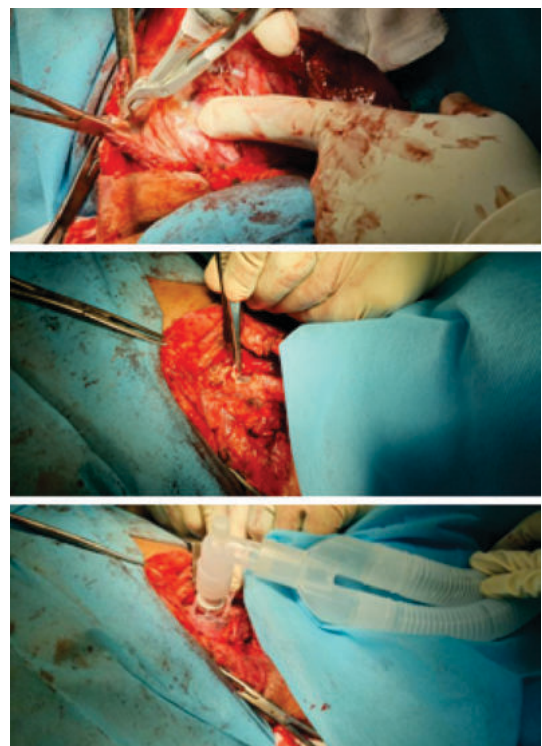
On Examination, a swelling of size 15cm x 10cm was palpable over the anterior surface of neck in the region of thyroid. The swelling moved with deglutition but not with protrusion of tongue. The swelling is firm in consistency. Entire thyroid is enlarged with left lobe being larger than the right lobe.

The trachea was found to be deviated to the right side. The patient also had stridor. She had no signs of hyperthyroidism or hypothyroidism. No other swellings were palpable anywhere else in the body. Her room air oxygen saturation was 94%. Her vitals were stable.

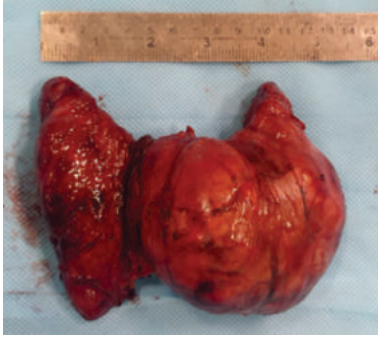
Ultrasound guided Core needle biopsy was done and sent for frozen section study. The histopathology features were consistent with large B-cell lymphoma of Thyroid.

She was started on steroids to relieve the compression symptoms and to reduce the swelling. The next day, she developed severe breathlessness and endotracheal intubation was done. Based on the severe compression symptoms and airway compromise, after discussion with surgical endocrinology team, decision was taken to do total thyroidectomy and tracheostomy.

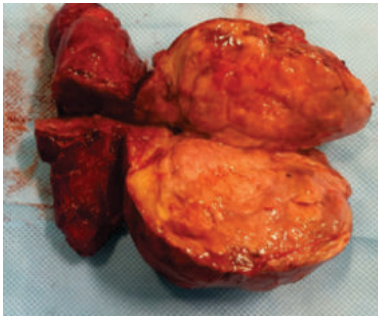
Intra-operatively, the left lobe of thyroid was found to be grossly enlarged and firm in consistency, surrounding tissues were fibrotic and thickened. The left lobe of thyroid was found compressing and deviating the trachea to right side. We proceeded with Total thyroidectomy and tracheostomy. Adequate hemostasis was achieved, subplatysmal drain placed and wound closed in layers. A.B.C.



**Fig.A,B,C- Intraoperative pictures**



**Fig.D- Operative specimen**



**Fig.E- Cut section of specimen**

Post operative pathology specimen report confirmed the diagnosis of large B-cell Non Hodgkin's Thyroid lymphoma.

#### **DISCUSSION**

Thyroid lymphoma is classified as primary and secondary thyroid lymphoma. Primary Thyroid Lymphoma affects the thyroid first and then spreads to other lymphnodes or organs. Secondary thyroid lymphoma occurs secondary to spread from other organs or lymphnodes. Primary Thyroid Lymphoma is a rare disease. Most of the primary thyroid lymphomas are Diffuse large B-cell lymphomas. PTL accounts for less than 2 percent of lymphomas. Early diagnosis and treatment is important as it can grow rapidly and can cause severe compressive symptoms and compromise the airway. Management of PTL requires involvement of multidisciplinary team of specialists. Prognosis depends on age, comorbidities, stage. If treated early with combined chemo-radiotherapy, it has good prognosis. Steroids can be used to reduce the swelling and symptoms. Role of surgery is limited to managing airway compromise with emergency tracheostomy, biopsy of tumor or total thyroidectomy in rare cases.

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