



CUT SECTION OF THYROID LYMPHOMA

General Surgery

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ABSTRACT

Primary thyroid lymphoma is a rare type of thyroid malignancy. Patients with Hashimoto's thyroiditis are at a great risk of developing Primary thyroid lymphoma (PTL). Though the role of surgery is limited the management of primary thyroid lymphoma, large tumour leading to compression symptoms and airway compromise, might be believed 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 * 10cm, tracheal deviation towards right and stridor. After evaluation, she was found to have primary thyroid lymphoma and based on her clinical condition , we proceed with total thyroidectomy.

KEYWORDS

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 Needle 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 Chemoradiotherapy 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.

DISCUSSIONS:

Thyroid lymphoma is classified as primary and secondary thyroid lymphoma. Primary Thyroid Lymphoma affects the thyroid first and then spreads to other lymph nodes or organs. Secondary thyroid lymphoma occurs secondary to spread from other organs or lymph nodes. 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.



REFERENCES:

1. Khanal P, Lageju N, Adhikari B. Diffuse Large B-Cell Lymphoma of Thyroid: A Case Report and Review of Literature. Indian J Otolaryngol Head Neck Surg. 2022 Oct;74(Suppl 2):2287-2290. doi: 10.1007/s12070-020-02088-1. Epub 2020 Sep 5. PMID: 36452532; PMCID: PMC9702408.
2. Peixoto R, Correia Pinto J, Soares V, Koch P, Taveira Gomes A. Primary thyroid lymphoma: A case report and review of the literature. Ann Med Surg (Lond). 2016 Dec 21;13:29-33. doi: 10.1016/j.amsu.2016.12.023. PMID: 28053701; PMCID: PMC5199157.
3. Ollila TA, Olszewski AJ. Extranodal Diffuse Large B Cell Lymphoma: Molecular Features, Prognosis, and Risk of Central Nervous System Recurrence. Curr Treat Options Oncol. 2018 Jun 21;19(8):38. doi: 10.1007/s11864-018-0555-8. PMID: 29931605; PMCID: PMC6294323.
4. Sun XS, Bay JO, Marcy PY, Hammoud Y, Lacout A, Michels JJ, Guevara N, Thariat J. Traitement des lymphomes thyroïdiens primitifs de stade localisé [Treatment of primary thyroid lymphomas]. Bull Cancer. 2013 Oct;100(10):1031-42. French. doi: 10.1684/bdc.2013.1820. PMID: 24077086.
5. Graff-Baker A, Sosa JA, Roman SA. Primary thyroid lymphoma: a review of recent developments in diagnosis and histology-driven treatment. Curr Opin Oncol. 2010 Jan;22(1):17-22. doi: 10.1097/CCO.0b013e3283330848. PMID: 19844180.

6. Khan SA, Ali D, Aziz A, Islam N. Primary thyroid lymphoma: Case series of patients from a developing country. *J Pak Med Assoc.* 2022 Sep;72(9):1858- 1861. doi: 10.47391/JPMA.4281. PMID: 36280993.
7. Widder S, Pasieka JL. Primary thyroid lymphomas. *Curr Treat Options Oncol.* 2004 Aug;5(4):307-13. doi: 10.1007/s11864-004-0021-7. PMID: 15233907