PRIMARY LYMPHOMA OF THE THYROID GLAND: A RARE CASE REPORT

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ABSTRACT

Primary lymphoma is an uncommon malignancy of the thyroid, comprising between 0.6 and 5 percent of all the thyroid malignancies. We report a rare case of lymphoma of the thyroid in a 65 year old female patient, who presented to us with a thyroid swelling for the past one year with difficulty in swallowing and hoarseness of voice since one month.

KEYWORDS

Lymphoma Thyroid, Thyroid Swelling, Hashimoto's Thyroiditis.

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INTRODUCTION

Primary lymphoma is an uncommon malignancy of the thyroid, comprising between 0.6 and 5 percent of all the thyroid cancers.¹ The majority of thyroid lymphomas are diffuse large cell of B cell origin. Malignant lymphomas are more common in female than males (3:1).² Normal thyroid gland does not contain lymphatic tissue. However, its presence is characteristic for pathological conditions, mainly as a result of the transformation of autoimmune thyroiditis.³

We report a rare case of lymphoma of the thyroid in a 65 year old female patient, who presented to us with a thyroid swelling for the past one year and difficulty in swallowing with hoarseness of voice since one month. Local examination revealed a diffuse thyroid swelling (Fig. 1), which moves on deglutition with firm-to-hard in consistency.

There was no cervical lymphadenopathy with any signs of thyrotoxicosis. Her thyroid profile and thyroglobulin antibodies were within normal limits. The neck x-ray was normal and indirect laryngoscopy showed bilateral mobile cords. The fine needle aspiration cytology showed medium to large malignant lymphocytes having finely dispersed chromatin with look-alike of Reed-Sternberg cell, which was suggestive of malignant lymphoma. (Fig. 2)

Patient underwent six cycles of chemotherapy with CHOP regimen (Cyclophosphamide, Doxorubicin, Vincristine and Prednisolone) and after one year of follow-up the thyroid swelling almost disappeared with symptoms and signs of the same was relieved. (Fig. 3)

DISCUSSION

Primary thyroid lymphoma is almost always of B-cell lineage.⁴ About 60-80% of thyroid lymphomas are diffuse large B-cell lymphomas. Some believe that a pathogenic link exists between autoimmune thyroid disease and thyroid non-Hodgkin's lymphoma.

The proposed theory hypothesizes that chronic antigenic stimulation secondary to the autoimmune disorder leads to chronic proliferation of lymphoid tissue, which eventually undergoes a mutation that results in clonal proliferation, leading to the development of lymphoma.⁵

The lymphoma thyroid presents as a rapidly growing thyroid swelling in the elderly woman in the sixth and seventh decade of life. The association between lymphoma thyroid and Hashimoto's thyroiditis has been reported between thirty to seventy percent.

The diagnosis of thyroid lymphoma can easily be established by fine needle aspiration cytology or core biopsy.⁶ Immunohistochemistry using specific antibodies to detect antigens in biological tissues has improved the accuracy in diagnosing lymphoma.

There are various modalities of treatment for lymphoma of thyroid such as Chemotherapy, Radiation and Surgery. Patients with obstructive symptoms require surgery followed by chemotherapy. Radiation therapy is used most commonly after 3-6 courses of chemotherapy in form of modified mantle irradiation including thyroid, bilateral neck, supraclavicular area and mediastinum.⁷

CONCLUSION

Lymphoma of the thyroid gland should be considered in elderly female patients with a rapidly enlarging goiter, especially in patients with a history of Hashimoto's thyroiditis. The recommended management strategy includes chemotherapy, radiotherapy, surgery and immuno-chemotherapy with monoclonal antibodies.

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Fig. 1: Photograph showing Diffuse Thyroid Swelling in the Neck

A

B

Fig. 2: Photomicrograph of Low and High Power Field showing Malignant Lymphocytes having Finely Dispersed Chromatin with Look-Alike of Reed Sternberg Cell suggestive of Lymphoma Thyroid

Fig. 3: Photograph showing Disappearance of the Thyroid Swelling After Completion of Chemotherapy