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RESEARCH ARTICLE

PRIMARY LYMPHOMA OF THE THYROID GLAND: A CASE REPORT

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ABSTRACT

Background: Primary lymphoma is an uncommon malignancy of the thyroid gland, accounts between 1–5% of all thyroid cancers and 1 to 2% of all lymphomas outside the lymph nodes. *Methods:* We report a case of a 43 year old woman presented with recurrent thyroid swelling, diagnosed as thyroid lymphoma. *Result:* A 43-year-old female presented to hospital with thyroid swelling, on physical examination, a palpable firm nodule, sized 3 x 2.5 cm, was noted over thyroid gland. Thyroid ultra sonograms showed enlarged thyroid lobes with hypervascularity and central trachea. The patient was euthyroid in laboratory findings. The result of the fine-needle aspiration cytology study was malignant lymphoma. The diagnosis was confirmed by histopathological samples from open biopsy. *Conclusion:* Thyroid lymphoma is an uncommon tumor which requires prompt diagnosis and early intervention.

Key words:

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INTRODUCTION

Case report

A 43-year-old Sudanese female presented to Omdurman military hospital with recurrent thyroids welling, after subtotal thyroidectomy done 3 years ago. On physical examination, a palpable firm painless nodule, sized 3 x 2.5 cm, was noted over thyroid gland. There were no palpable lymph nodes. Thyroid ultra sonograms showed enlarged thyroid lobes with hypervascularity, central trachea, and no retrosternal extension.

laboratory result as follows : Thyroid function test shows – triiodothyronine {T3} 3,1ng/l- {NR2,2-6,9ng/l} thyroxin T4 9ng/l- {NR4,8-11,6}, Thyroid stimulating hormone {TSH}, {3ng/l- NR0,4-6,2}. Anti-thyroid peroxidase antibody and antithyroglobulin antibody were not done. According to the hormonal evaluation she was (euthyroid). Other laboratory tests were Hb 12,9g/l and normal RFT.

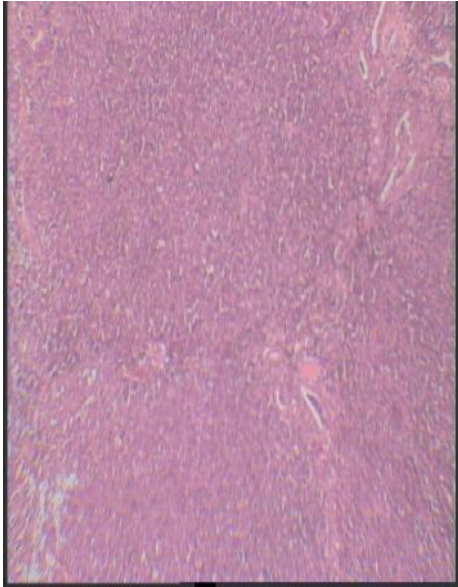
The results of Fine-needle aspiration Biopsy (FNAB) of the prevalent nodule, displaying few follicular cells with plentiful

of lymphocytic cells with some atypical ones suspicious lesions of malignant lymphoma (neoplastic). Laryngoscopy was done and revealed normal left vocal cord.

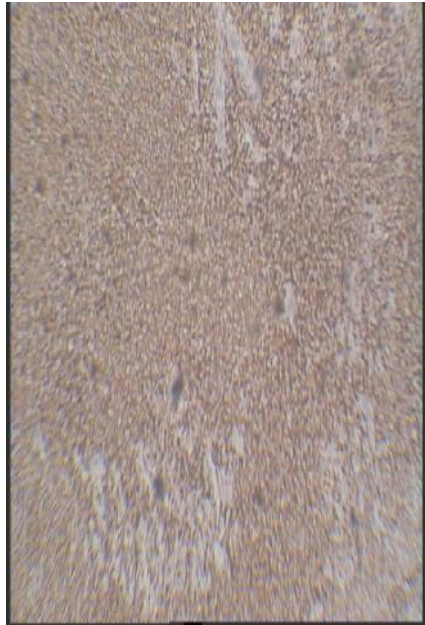
The Patient underwent total thyroidectomy. Macroscopic examinations showed grayish-white with smooth fish-fleshy surface. Microscopic examination with the H&E stained showed a diffuse lymphocytic infiltrate composed of atypical lymphoid cells, monocytoid lymphocytes with irregular nuclei, hyperchromasia, few sparing small lymphocytes and plasma cells, effacing the normal thyroid parenchyma in a background of a chronic lymphocytic thyroiditis.

The results of immune his to chemistry showed that the atypical cells stained strongly positive with LCA and CD 20+ve (B-cell markers) and negative with CD 3 and CD5, the diagnosis of Non-Hodgkins lymphoma (MALT Lymphoma) involving the thyroid in the background of Hashimoto's thyroiditis was confirmed Patient then was referred to oncology department for further evaluation.

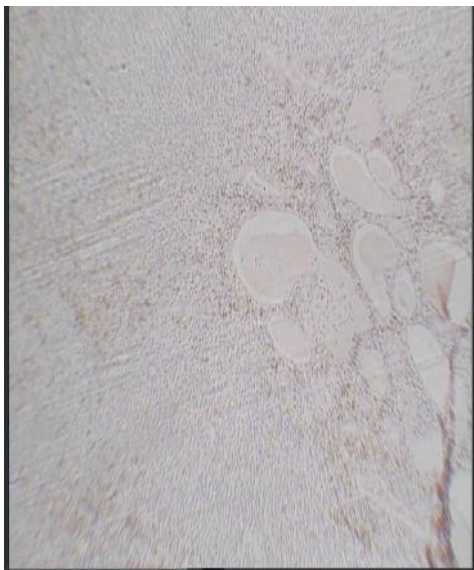
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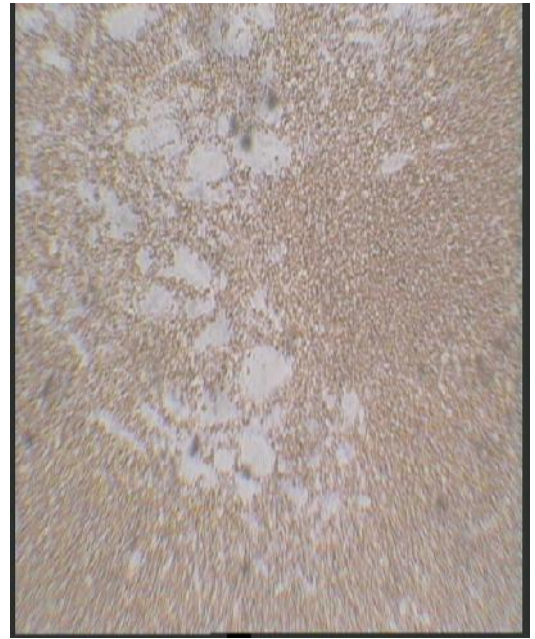


Fig.1 Microscopic appearance: thyroid gland showed a diffuse lymphocytic infiltrate composed of monocytoid lymphocytes with prominent plasma cell differentiation on background of chronic lymphocytic thyroiditis. (H&E) ..

Fig2-3and 4: IHC: LCA, Positive

Fig 3-CD5Negative.

Fig4-CD 20 Positive result. (Large cells exhibiting large cells and preserved thyroid follicels)

DISCUSSION

Thyroid Lymphoma is rare tumor with marked female preponderance of a sex ratio of (8:1). The mean age is between 50-80years, with peak around 60 years and, commonly presents as a neck swelling that may or may not rapidly enlarge.

Major histological types include Diffuse Large B-Cell Lymphoma (DLBCL), which constitute about(60-80%)of thyroid lymphomas secondly the extra nodal low-grade B-cell lymphoma of mucosa-associated lymphoid tissue (MALT) type which also can occurs in other organ such as gastrointestinal tract, salivary gland and orbit, lung, and breast, this type of lymphoma is closely related to Hashimoto's thyroiditis, then Marginal Zone lymphoma type and mixed. Most patients with Primary thyroid lymphoma have a rapidly growing painless thyroid mass causing compressive symptoms. These symptoms overlap with that of the anaplastic thyroid carcinoma.

Fine Needle Aspiration cytology (FNA) plays an important role in the diagnosis of thyroid lymphoma, but gold standard for histologic diagnosis is considered the core needle biopsy or surgical biopsy. In our patient the FNA

Was diagnostic and the cell Immunocy to chemistry confirms the lymphoid origin of the cells and their B – lineage.

There are several case reports which illustrate common etiology of the thyroid lymphoma and HT. [Kapadia SB et al](#) reviewed 21 cases of thyroid lymphoma in a period between 1969 and 1980, associated HT was found histologically in 57% Another study done by [Hadzic B et al](#) reported 49 cases, out of which histologic diagnosis of lymphocytic thyroiditis was

evident in 9 (18%) patient. localized thyroid lymphoma, (MALT) lymphomas limited to the thyroid have a good prognosis with an overall 5-year survival rate of 70% to nearly 100% with combined radiation therapy and chemotherapy regardless of the histologic grade. Relapse observed in patients with advanced stage, tumor bulk and extra capsular extension.,

In conclusion, this case illustrates that low-grade NHL of the MALT type may arise in the setting of chronic autoimmune thyroiditis and this situation makes it different from other extra nodal presentations of non-Hodgkins lymphoma.

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