

Case Presentation on Hashimoto's Thyroiditis (Maltoma)

Dr Wangol Kiyam, Dr. G. Hemalatha, Dr .B .O. Parijatham

Department of Pathology, Sree Balaji Medical College and Hospital, Bharath University, Chennai Tamilnadu, India

*Corresponding author

Dr Wangol Kiyam

Email: wangolkiyam54@gmail.com

Abstract: Primary thyroid lymphoma consisted of 5% of all thyroid malignancy and mucosa associated lymphoid tissue (MALT) is a subset of B cell non Hodgkin lymphoma though they have a better prognosis than non MALT lymphoma but proper diagnosis is require for the course of treatment. There is always a challenge in diagnosing hashimoto's thyroiditis as there is diffuse lymphocytic and plasma cells infiltration. In this case by FNAC it was reported as Hashimoto thyroiditis and due to increasing size thyroidectomy was done. But in histopathological examination it shows features of Hashimoto as well as lymphoma. Immunohistochemistry was done and it was Lambda –Kappa coaktail positive and additional complimentary marker was performed and were positive for CD20 and CD3 .The impression was Low grade diffuse lymphoma (MALTOMA) Immunohistochemistry plays a major role in differentiating the cases. Impression- Low grade diffuse lymphoma (MALTOMA).

Keywords: Lymphoma, Nodular hyperplasia, Lymphocytic infiltration, Hodgkin lymphoma, Hashimoto, Immunohistochemistry

INRODUCTION

Primary thyroid lymphoma is a very rare entity which needs to be differentiated from Hashimoto thyroiditis as for proper line of treatment. As we know there are diagnostic dilemmas in diagnosing the two diseases, in these case we have presented we have highlighted the use of immunohistochemistry for the final diagnosis. In our case we have applied various pathological approach like fine needle aspiration, histopathological examination (H&E), biochemical correlation and immunohistochemistry.

CASE REPORT

A 40 year old male came with complaints of swelling in front of neck for 4 years with the history of rapidly increasing in size. The swelling was painless and moves with deglutition

His general physical examination and vital signs were normal. Ultrasound shows heterogeneous echotexture and diffuse hypoechogenicity of the

bilateral thyroid gland impression- Multinodular Goitre .Thyroid profile was normal.

An FNAC was done and reported as Nodular Hyperplasia of thyroid–Multinodular Goitre. Due to increasing size patient underwent Total thyroidectomy and histopathological examination was done on the specimen.

GROSS

Total thyroidectomy specimen with one lobe measuring 11 x 5 x 15 cm and other lobe measuring 12 x 5 x 15 cm. external surface was nodular, cut surface shows tan colour and nodular.

MICROSCOPY

Multiple sections from the thyroidectomy specimen shows lobules of thyroid aciniseparated by fibrous septa with diffuse destruction of follicles denselymphoplasmocytic infiltrate in the stroma. Follicles show hurthle cell metaplasia



Fig.1: Nodular surface

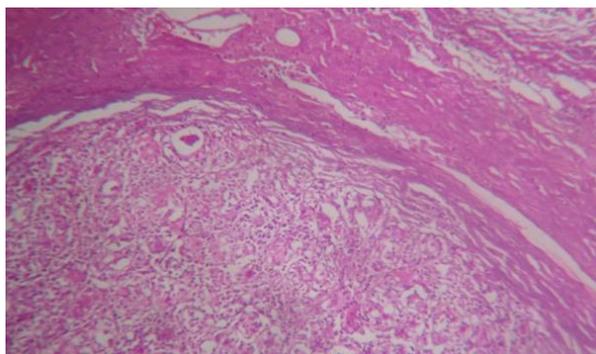


Fig. 2: Lobules of thyroid acini separated by fibrous septa

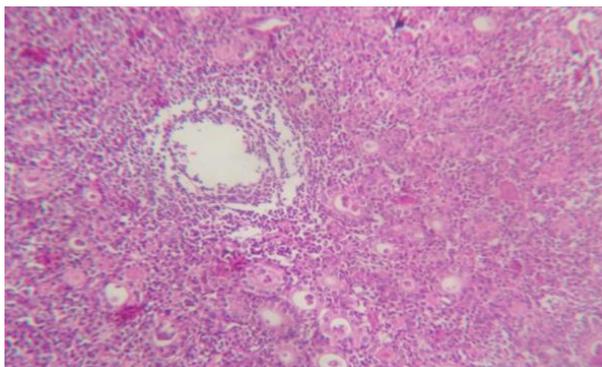


Fig.3: Diffuse destruction of follicles and dense lymphoplasmacytic infiltrate

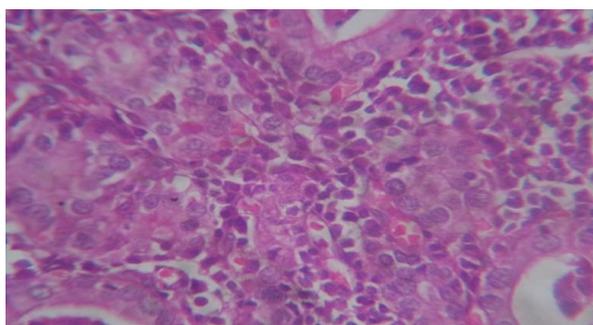


Fig.4: Follicles show Hurthle Cell metaplasia

DISCUSSION

About 5% of all thyroid malignancies consist of primary thyroid lymphoma which may be Hodgkin (HL) or Non Hodgkin (NHL) [1, 4]. Mucosa associated lymphoid tissue are subset of B cell NHLs [6, 1] which has a better prognosis than non MALT lymphoma [2]. MALT lymphomas are thought to develop from acquired lymphocytic tissue in condition like autoimmune process or chronic infection [2].

Most MALT lymphoma occurs in people in their 60s can affect gastrointestinal, lungs, eyes, skin, thyroid breast etc. [3]. When it occurs in thyroid patient may present with rapidly growing thyroid mass and may cause hoarseness of voice, breathing problems if the mass is well large enough patient may have difficulties in swallowing, patient may also present with B syndromes like night sweating, fever, weight loss or whole body itching.

Ultrasound, FNAC and immunohistochemistry are the main modalities which is used to diagnose lymphoma [4]. All types of thyroid lymphoma are positive for CD 45, HL may be positive for CD 20 and CD 15. There is homology between the lymphoplasmacytic infiltrate in Hashimoto's thyroiditis and MALT lymphoma of thyroid, like lymphoma of mucosal sites and thyroid appears to be derived from parafollicular B cells, and high grade lymphoma of thyroid appears to be derived from low grade tumours there is also close histological, immunohistological similarities [5]. There is also high risk of the patient which is known case of Hashimoto thyroiditis to transform in MALTOMAS of thyroid [4, 7].

Treatment of choice includes hemi or total thyroidectomy, chemotherapy, radiotherapy or combination chemo and radiotherapy both [8]. Thyroid

lymphoma has good prognosis with overall survival rate of 5 to 10 years with regular follow up[9].

CONCLUSION

Mucosa associated lymphoid tissue is a subset of non Hodgkin lymphoma which are commonly occurs in patients with Hashimoto thyroiditis. This case stresses the role of immunohistochemistry in giving the definitive diagnosis.

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