The Contribution of a Multidisciplinary Team in Enhancing Thyroid Lymphoma Management

Ramadan Selim[1] , Gehad A. Saleh[2] , Dina Ibrahim[3], Shaimaa El-Ashwah[4]

[1] Mansoura Manchester Medical Program for Medical Education, [2] Radiology department, [3] Medical oncology unit, , [4] Hematology Unit ,Faculty of Medicine, Mansoura University, Mansoura, Egypt

Background

Although thyroid lymphoma is an uncommon malignant disease, it is still important to consider in patients with an enlarging neck mass. Primary thyroid lymphoma (PTL) can be cured with chemoimmunotherapy without thyroidectomy, thus avoiding surgical complications as well as hormonal replacement therapy [1,2] .

Objective

The study aims to evaluate the clinical features, risk factors, and treatment outcomes of PTL.

Patients and methods

A retrospective study was carried out in the Oncology Center of Mansoura University. The study included 13 PTL patients (4 male and 9 female) with a median age of 58 years. The patients were treated with rituximab ± anthracycline-based regimens. Demonstration of the clinicopathological features of PTL patients.

Patient & Result

In this study, 9 patients (69.3%) were diagnosed by fine-needle aspiration and core needle biopsy, 1 patient (7.7%) by hemithyroidectomy, and 3 patients (23%) by total thyroidectomy. The common stage of presentation was early stage, comprising 7 patients (53.8%), followed by advanced stage, comprising 6 patients (46.2%). Three patients (23.07%) had a history of Hashimoto's thyroiditis. Two patients (15.4%) tested positive for hepatitis C virus. One patient (7.7%) had rheumatoid arthritis. One patient had a double malignancy in the form of thyroid carcinoma and thyroid lymphoma. Eight patients (61.6%) presented with high-intermediate and high International Prognostic Index risk. Four patients (30.8%) achieved completed remission, and the median disease-free survival was 20.58 months. The median overall survival was 11.5 months (range: 2.03–126.03 months).

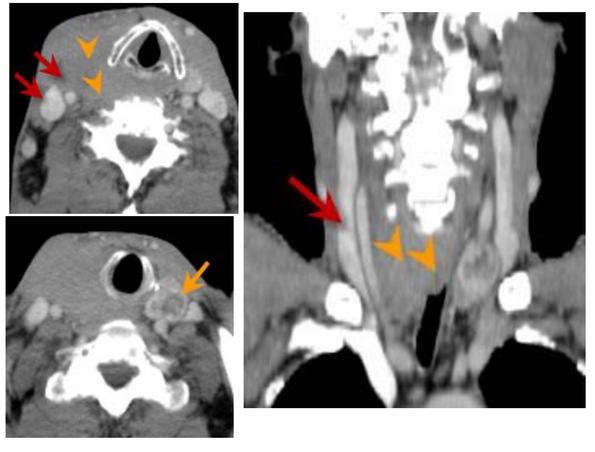


Figure legend: Figure 1: 68-year-old male with Non-Hodgkin lymphoma (diffuse large B. cell type) of the right thyroid lobe. Post contrast CT neck axial and coronal images: revealed infiltrative hypo-attenuating right thyroid lobe mass (arrowheads) measures 5.5 x 3 x 8 cm, it's seen inseparable from Rt sternomastoid muscle laterally and Rt submandibular gland anteriorly, partially encasing Rt CCA and contacting Rt IJV without caliber changes (red arrows) and extending into post cricoid regions postero- medially. left thyroid hypodense nodule 12 x 10 mm(yellow arrow) No suspicious cervical LNs.

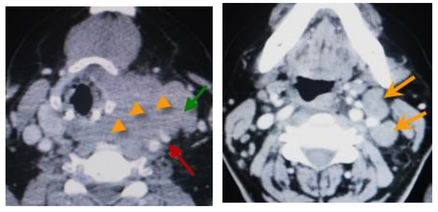


Figure 2: 66 year old female with Non Hodgkin lymphoma (diffuse large B. cell type) of the right thyroid lobe. Post contrast CT neck axial images: revealed hypo-attenuating left thyroid lobe mass (arrowheads) measures 6 x 7 cm, it' s seen infiltrating Rt sternomastoid muscle laterally (green arrow), totally both encasing Rt CCA Rt IJV with attenuated IJV(red arrow), extending into prevertebral space postero- medially. -Multiple metastatic left cervical LNs(yellow arrows) level II ,III ,IV the largest measures 1.8x2.6 cm

Conclusion

The cooperation of a multidisciplinary team of physicians, surgeons, and pathologists is necessary to detect PTL early and enhance its outcome through significant improvement of diagnostic and therapeutic strategies.

References

1-Stein SA, Wartofsky L. Primary thyroid lymphoma: a clinical review. The Journal of Clinical Endocrinology & Metabolism. 2013 Aug 1;98(8):3131-8.

2-Hayashi T, Hirokawa M, Kuma S, Higuchi M, Suzuki A, Kanematsu R, Kudo T, Katsuki N, Haba R, Miyauchi A. Clinicopathological features of primary thyroid Burkitt's lymphoma: a systematic review and meta-analysis. Diagnostic Pathology. 2020 Dec;15(1):1-8.