Abrupt Obstruction of the Central Airway by a Relapse of Thyroid Gland Diffuse Large B-Cell Lymphoma: An Unusual Presentation

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Introduction

Primary thyroid lymphoma can be defined as a lymphoma that arises from the thyroid gland. This definition excludes those that invade the thyroid gland as a consequence of either metastasis or direct extension. Primary thyroid lymphoma is a rare neoplasm comprising 1%–5% of all thyroid malignancies and 1%–7% of all extra-nodal lymphomas. Most thyroid lymphomas are of B-cell origin. Patients usually present with rapidly growing masses in the thyroid gland in their sixth–seventh decades. The disease is frequently accompanied by chronic Hashimoto's thyroiditis. Distinction between primary-secondary lymphoma is important due to the difference in both prognosis and therapy. Treatment and prognosis varies according to histology and stage. Treatment options include surgery, radiotherapy, chemotherapy and their combination.

Objective

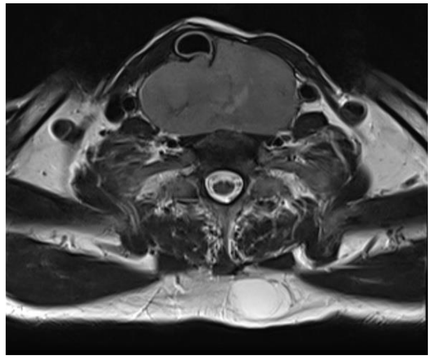
Sharing a rare case of relapsed primary thyroid gland diffuse large B-cell lymphoma (DLBCL) and its diagnostic and therapeutic outcome, emphasizing the airway obstruction event.

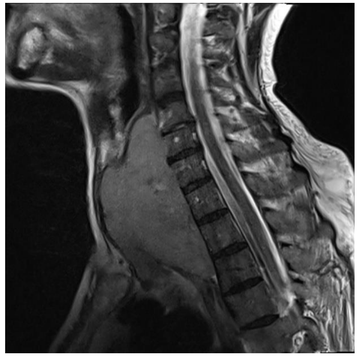
Materials & Methods

Retrospective case study presentation, the data were collected from the protocols of the clinic of hematology in University Clinical Center of Kosovo.

Case Report

In March 2019, a 69-year-old man was admitted to our hospital with the following results of the thyroid gland biopsy—HP/Dg. High-grade DLBCL of the thyroid gland (CD20+, CD23+, Ki67=95%) which was led by the endocrinologist because of the swelling symptoms around the neck and the changes in the thyroid gland ultrasound. The patient underwent total thyroidectomy. Postoperative histopathologic evaluation revealed morphologic and immunophenotypic findings consistent with DLBCL as mentioned above. The patient had no family history of any chronic or malignant disorders and was nonsmoker. Since the patient's laboratory tests and physical examination findings were normal, we decided to immediately start treating him with RCHOP protocol. After 8 rounds of chemotherapy, the patient was stable, and we planned to continue with maintenance therapy. Unfortunately, the patient came back before suggested with severe dyspnea, and the neck CT revealed a paravertebral/retro-tracheal mass of 10.4×9.7×8.0 cm that was dislocating the trachea in the anterior plan and compromising the trachea and esophagus in T2 level. In the following days, there was an exacerbation of the dyspnea leading to total airway obstruction with SpO_2 decreasing below 65%, and we needed to intubate the patient. Immediately after that, a tracheostomy was performed by an otorhinolaryngologist. When the patient's condition stabilized, we decided to treat his relapse with 4 cycles of salvage therapy—R-ESHAP—because of the lack of a transplant procedure in our country. After salvage chemotherapy, we performed a PET-CT and it revealed no pathological FDG absorption, and a repeated neck CT showed a total reduction of the retro-tracheal mass. The patient is still being followed every 6 months and has been in complete remission ever since.







Conclusion

Seventeen months after completing the R-ESHAP treatment protocol, the patient is still in remission with no signs of disease and a normal CT scan. Despite the rare presentation of DLBCL, optimal early management and a multidisciplinary approach had a great impact on the patient's prognosis.

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