the size of the lesion and disappearance in 46% of the cases. In our center we have experience with PPI in thyroid cysts and adenomas since 2017, this requires fewer sessions and a lower dose, obtaining results of volume reduction in thyroid cysts of 80%. In this case we observed a reduction of 90% in the first month and disappearance in the fourth month, with a significant decrease in Tg washout from the first administration. **Conclusion:** Polidocanol is safe and effective so it should be considered in the treatment of oligometastasis in DTC.

Thyroid

THYROID CANCER CASE REPORTS

Primary Thyroid Lymphoma: Could Surgery Be Avoided

Romena Laukiene, MD, Karolina Miseviciute, BS.
Vilnius University hospital Santaros klinikos, Vilnius, Lithuania.

Background: Primary thyroid lymphoma is a rare thyroid disease that makes up only 1 to 5% of all thyroid oncological disorders. The average patient with primary thyroid lymphoma is a woman in her sixth or seventh decade with a history of Hashimoto's thyroiditis. **Clinical Case:** 28-year-old woman complained of hoarseness, rapidly enlarging mass of the neck. She was referred to an otorhinolaryngologist by her family physician who suspected upper airway pathology. Otorhinolaryngologist observed swelling of patients' larynx and prescribed treatment for suspected bacterial larynx infection. Symptoms kept worsening despite of treatment and patient was referred to an endocrinologist for a consultation. Blood lab tests were unremarkable. Ultrasound of the thyroid was performed which revealed a large (4,5 cm), hypoechoic, solid, homogenous node with Doppler signs of increased intranodular vascularity. Additionally, enlarged submandibular salivary gland lymph nodes on both sides of the neck were observed. FNAC (fine-needle aspiration cytology) was performed to diagnose possible thyroid malignancy, however findings showed atypia of undetermined significance (3rd category of Bethesda classification), to differentiate from lymphocytic thyroiditis. Because of high risk of malignancy, it was decided to perform thyroidectomy. During surgery, urgent intraoperative biopsy revealed undifferentiated thyroid carcinoma. As radical tumor extirpation due to prominent surrounding fibrosis was impossible, then only one side lobectomy was performed. Final histological examination revealed large B cell lymphoma, phenotype: CD20+, BCL6+, MuM1+, CD21+, cMyc-, BCL2-, CD10-, CD30-, Ki-67 up to 97%. More accurate disease staging was performed postoperatively, PET scan and computed tomography revealed disseminated primary thyroid lymphoma. Final diagnosis was Stage IV primary large B cell lymphoma of the thyroid. Patient was treated with chemotherapy according to Rx7-CHOP14x6 (Rituximab, cyclophosphamide, doxorubicin, vincristine, prednisone) protocol. The treatment was tolerated well, 3 months after, complete remission of the disease was observed. During outpatient visits patient remained in remission for all 5 years of planned regular check-ups. **Conclusion:** This case demonstrates the diagnostic challenge of primary thyroid lymphoma. In the presence of rapidly enlarging thyroid mass, thyroid lymphoma is not usually suspected. FNAC as golden standard of thyroid malignancy often does not allow differentiation of this pathology. In this case, a core biopsy could have helped to make correct preoperative diagnosis and to avoid unnecessary surgery.

Thyroid

THYROID CANCER CASE REPORTS

Primary Thyroid Lymphoma: Maintaining Diagnostic Scrutiny

Diana Juhee Chang, MD, Tina Mosaferi, MD, Sarah Sangnim Rhee Kim, MD.
UCLA, Los Angeles, CA, USA.

Background: Primary thyroid lymphoma (PTL) is a rare condition representing <5% of thyroid malignancies with diffuse large B-cell lymphoma (DLBCL) as the most common subtype (1). Although not commonly managed in the endocrine sphere, identification is paramount to prognosis and treatment. We present a case of PTL to highlight the importance of diagnostic scrutiny and clinical follow up. **Clinical Case:** A 69-year-old man with a history of Hashimoto's thyroiditis presented with an enlarging neck mass. The patient noted development of a left-sided anterior neck mass 3 days prior to seeking care. He denied compressive symptoms and B symptoms (weight loss, fevers, and night sweats). Physical exam revealed a large, firm left-sided thyroid nodule. Serum studies were notable for TSH 39.1 mcIU/mL (0.30-4.7 mcIU/mL), FT4 0.9 ng/dL (0.80-1.70 ng/dL), and TPO Ab 127 IU/mL (<=20 IU/mL). Levothyroxine 100 mcg daily was started. Neck ultrasonography showed a 54 mm hypoechoic, solid left thyroid nodule without calcifications. No abnormal cervical lymph nodes were present. FNA revealed a mixed population of small lymphocytes with no monoclonal B cell population or T cell aberrancies on flow cytometry. In the setting of ongoing nodular growth, the patient underwent core needle biopsy which revealed DLBCL (Ki67 proliferation index >80%, EBV-EBER negative). For diagnostic confirmation and staging, a whole-body FDG-PET scan was performed with an intensely FDG-avid left thyroid mass and no metabolic evidence of additional lymphoproliferative disease. Bone marrow biopsy did not show lymphomatous involvement. The patient was diagnosed with primary thyroid lymphoma and started on chemotherapy with R-CHOP.
Conclusion: PTL commonly presents as a rapidly enlarging, painless neck mass that may be accompanied by B symptoms. Hashimoto's thyroiditis is a known risk factor. Our case in particular required more diligence in the setting of an FNA with mixed lymphoid cells and negative flow cytometry. Initial differential diagnosis included intrathyroidal lymph node, Hashimoto's thyroiditis, thyroid adenoma/malignancy with a false FNA, and lymphoma. Notably, FNA biopsy is only associated with 71% sensitivity in diagnosing PTL, whereas core biopsy has a 93% sensitivity rate (2). Upon histopathologic disease diagnosis, collaboration with oncology is needed for further staging and initiation of chemotherapy +/- radiation.
References: (1) Pavlidis ET, Pavlidis TE. A Review of Primary Thyroid Lymphoma: Molecular Factors, Diagnosis and Management. *J Invest Surg.* 2019;32(2):137-142.