PP-T-15

GRAVES' DISEASE COMPLICATED BY POST-OPERATIVE GRAVES' OPHTHALMOPATHY AND PRETIBIAL MYXEDEMA

https://doi.org/10.15605/jafes.037.AFES.142

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BACKGROUND
The prevalence of Graves' Ophthalmopathy (GO) and pretibial myxedema is 0.15/10,000. We report a rare case of Graves' disease (GD) with development of GO and pretibial myxedema post-thyroidectomy which improved following treatment with teprotumumab.

CASE
A 51-year-old female presented with tachycardia, heat intolerance, and weight loss. She had undetectable TSH, elevated free T4 (6.1 ng/dL), total T3 (332.4 ng/d), TSI (19.50 IU/L), and TRAb (27 U/L; normal value <1.0 U/L). She denied any eye symptoms and did not have exophthalmos. She has an enlarged, hypervascular thyroid on neck ultrasound. She was treated with atenolol and methimazole to achieve euthyroidism. She eventually elected total thyroidectomy. Within 3 months after thyroidectomy, she developed exophthalmos and pretibial myxedema characterized by hyperpigmentation with the presence of firm papules and scattered coalescent plaques on the anterior aspects of both lower extremities. Skin biopsy confirmed pretibial myxedema. She was treated with teprotumumab with significant improvement of both GO and pretibial myxedema.

CONCLUSION
The occurrence of GO and pretibial myxedema in a patient with GD post-thyroidectomy is uncommon. Pretibial myxedema occurs because of the deposition of glycosaminoglycans (GAG) secreted by fibroblasts which have been found to express thyroid stimulating hormone receptors (TSHR) leading to deposition of mucin in the papillary and reticular dermis. Despite thyroidectomy, the thyroid antibodies themselves may lead to the accumulation of GAG. In fact, thyroidectomy does not affect the course of GO. Pretibial myxedema management depends on the symptomatology. Topical or intralesional glucocorticoids are used to treat symptomatic cases, though there is a 30% chance of recurrence. Teprotumumab has been approved to treat GO and only case reports of its use leading to improvement of pretibial myxedema have been described. More data are needed to determine its efficacy as a treatment option for pretibial myxedema.

PP-T-16

THYROID HEMIAGENESIS ASSOCIATED WITH POSSIBLE HASHIMOTO'S THYROIDITIS IN THE REMAINING LOBE PRESENTING AS LATE-ONSET HYPOTHYROIDISM IN ADULTHOOD

https://doi.org/10.15605/jafes.037.AFES.143

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BACKGROUND
Thyroid hemiagenesis is a very rare abnormality, usually discovered incidentally during the evaluation of unrelated thyroid disorders. In thyroid hemiagenesis, the left lobe tends to be absent with concomitant compensatory enlargement of the opposite lobe. Thyroid hemiagenesis *per se* is typically not associated with hypothyroidism. Here, we present an unusual case of thyroid hemiagenesis associated with possible Hashimoto's thyroiditis.

CASE
A 36-year-old Thai female with no known underlying disease presented with fatigue, chills, and weight gain for 6 months. She was given levothyroxine 75 µg/day based on results of her thyroid function tests at the previous hospital. However, her symptoms persisted. She denied family history of thyroid disorders and had no history of neck radiation. Initial blood tests at our hospital showed subclinical hypothyroidism (slightly elevated TSH level at 4.86 mIU/L; reference range 0.27-4.20 mIU/L) with negative thyroid auto-antibodies. Physical examination showed nonpalpable thyroid gland.

Her thyroid ultrasound revealed absent left thyroid lobe and atrophic right thyroid lobe with heterogeneous echotexture, compatible with possible Hashimoto's thyroiditis. FNA was no longer done to confirm the Hashimoto's thyroiditis. Levothyroxine was increased to 100 µg/day to keep her TSH level in the mid-normal range. During a 3-year follow-up period, the patient remains in a stable condition.