INTRODUCTION: Hashimoto thyroiditis (HT) (with anti–thyroid peroxidase antibodies -TPOAb) and Graves Disease (GD) (with TSH receptor antibodies, TRAbs) are frequent autoimmune disorders responsible for thyroid dysfunction. There are 2 types of TRAbs, the ones that stimulate the thyroid (TSAb) causing Graves’ hyperthyroidism and those that block thyrotropin action (TBAb) being occasionally responsible for hypothyroidism. Unusual patients switch from TSAb to TBAb (or vice versa) with concomitant thyroid function changes. The progression from a HT to GD is not frequent and there are only a few cases described in the literature.

CASE REPORT:

2006
A 63-year-old woman with history of obesity and depressive syndrome was referred to our department in 2006 due to increasing weight, with a body mass index of 39Kg/m².

Neck ultrasonography (US) revealed thyroid nodular disease and the laboratory confirmed a HT (TPOAA +) with normal thyroid function.

2007
After 1 year of follow-up, the patient presented with subclinical hypothyroidism (TSH 11,0), initiating treatment with levothyroxine 50ug/day. Fine needle aspiration biopsy (FNAB) of thyroid nodule was benign. During 4 years, the patient maintained a stable thyroid function under levothyroxine.

2012
Five years after diagnosis of hypothyroidism, the patient presented a subclinical hyperthyroidism (TSH=0,01). Despite levothyroxine withdrawal, she maintained hyperthyroidism complains, with weight loss, palpitations, tremor and heat intolerance, initiating treatment with methimazole and beta-blockers.

After scintigraphy and TRAbs titration, the diagnosis of Graves Disease was confirmed.

DISCUSSION: The distinction between an evolution from HT to GD or from TBAb to TSAb is very difficult. Although the presence of TPOAb suggested HT diagnosis, the concomitant presence of these antibodies with TRAbs is also frequent. Nevertheless, considering the prevalence of both condition, the first option seemed most likely. Patients with thyroid function fluctuation should be closely monitored.

REFERENCES:
1. MCLACHLAN SM, RAPOPORT B: Thyrotropin-blocking autoantibodies and thyroid stimulating autoantibodies: insight into the pathogenesis of hyperthyroidism in hypothyroidism or vice versa. Thyroid 2012.
5. TAKASU N, TAKEHATA K, Changes of TRAbs: clinical interrelation (TSHRAb) and Thyroid Stimulating Antibody (TGBAb) over 10 years in 30 TRAbs Positive Patients with Hypothyroidism and or 8 TRAbs Positive Graves’ Patients with Hyperthyroidism. Simulation of TGBAb and TSHab in TRAbs Positive Patients (TSHab) Thyroid Nov 2012.

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