GRAVES’ DISEASE ASSOCIATED WITH ALOPECIA AREATA DEVELOPED AFTER HASHIMOTO’S THYROIDITIS

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Introduction

Graves’ and Hashimoto’s thyroiditis are the most common autoimmune thyroid diseases. After Graves’, hypothyroidism can develop spontaneously or as a result of medical treatment, radioactive iodine therapy or surgery. Development of Graves’ after Hashimoto’s thyroiditis is a rare condition. Alopecia areata (AA) is an autoimmune disease. It has association with other autoimmune diseases such as thyroid disorders, anemias and other skin disorders. We present a 41 years-old woman with alopecia areata associated with Graves’ disease who was previously diagnosed as Hashimoto disease.

Case report

41 year-old female patient was referred to our clinic six year ago because of excessive weight gain, constipation, weakness and somnolence. Initial TSH was 7.95 IU/ml (normal range: 0.2-4.2 IU/ml), fT4 was 0.97 pmol/L (normal range 0.93-1.7). Anti-TPO: 551, Anti Tg: 332. L-thyroxin was started. the thyroid hormon levels remained normal limits in the last six years. But 4 months ago, she admitted with the complaint of excessive sweating, palpitation, discomfort, weight loss, trembling in hands, and diarrhea. TSH was <0,005 IU/ml, FT3: 17.01 pmol/L, FT4: 4.35 pmol/L. L-thyroxin was stopped and propranolol was started. After one week, TSH was detected <0,005 IU/ml, FT3 was 14.34 pmol/L and FT4 was 4.06 pmol/L. TSH receptor antibodies were >50 U/L. Power Doppler of the thyroid gland showed pattern of thyroid inferno (Figure 1). Propylthiouracil was added to the therapy. Alopecia areata was observed during this period (Figure 2). After decline of FT3 and FT4 levels, alopecia areata recovered.

Conclusion

The development of Graves’ disease after Hashimoto disease is a rare clinical process. Alopecia areata can be associated with both Hashimoto’s and Graves’ diseases. It is the first case of alopecia areata seen at the time of conversion of hashimoto to graves with increased TRAB levels. Interestingly, alopecia areata recovered completely after the decline of FT3 and FT4 levels with treatment.
Figure 1: Power Doppler showing thyroid inferno

Figure 2: Alopecia Areata in the scalp.