

Hashimoto's Thyroiditis in children: Case series report of three patients

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Background

- Hashimoto's thyroiditis (HT) is most commonly caused by autoimmune thyroid disease. Diagnosis of HT is made clinically and biochemically and supported by high anti-TPO and anti-Tg, biopsy is not indicated in most
- Thyroid function at presentation may significantly vary in the different pediatric reports, ranging from euthyroidism (52.1%) to overt hypothyroidism (41.4%) or, occasionally, hyperthyroidism (6.5%).

Objectives

The aims is to describe the clinical and laboratory features, the management of patients with HT at Vietnam National Children's Hospital.

Methods

- This is case series study including clinical features, biochemical, image findings, and management of 3 children (2 girls and one boy) with HT

Results

- All three exhibited the typical symptoms and signs of enlarge forming a painless goiter, no loss weight, no constipation.
- The first patient is a 7 years old – female, unremarkable medical history. She has normal motor mental development. Her height was – 0.5SDS (WHO) and her BMI was 15 kg/m². She was admitted to our clinical because of enlargement goiter and difficulty swallowing about 2 months ago. She presented with diffuse goiter grade 3. Investigations showed low levels of plasma T3 (0.6 nmol/l) and FT4 (4.39 pmol/l), elevated level TSH (117.51 mIU/l), Anti-TG (1748 U/ml), Anti-TPO (339.6 U/ml); thyroid ultrasound showed hypertrophy, uniform parenchyma and no focal nodule; echocardiography and electrocardiography were normal.

Results

- The second patient is an 8-year-old girl, with no medical history. Her height was normal. Her painless goiter was recognized from two weeks, investigations showed low levels of plasma T3 (0.89 nmol/l) and FT4 (4.19 pmol/l), elevated levels of TSH (129.7 mIU/l), Anti-TPO (> 7260 U/ml), Anti-TG (2547 U/ml) and normal levels of TRab (< 0.3 U/l); echocardiography was normal but manifesting sinus arrhythmias on the electrocardiogram.
- The last patient was a 6-year-old boy. His medical history was unremarkable. His height was +0,5SDS (WHO) and normal BMI. He presented with goiter grade IIa and normal function of thyroid during first year of his illness. The review data showed FT4 = 12.91 pmol/l, TSH 23.44 mIU/l, Anti-TG 2073 U/ml, hypertrophic thyroid on ultrasound.
- All three patients are treated with thyroid hormone replacement – Levothyroxine.

Conclusions

- We received and confirmation of diagnosis for three cases with HT in a week, with the manifestations of goiter and hypothyroidism. This implies that whether or not all goiter patients are tested for autoimmune thyroid marker.

References

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