

Subclinical hypothyroidism in children and adolescents : About a study of 25 cases

INTRODUCTION

The hypothyroidism is defined by an elevated TSH with normal FT4 and the absence of symptoms of hormonal deficiency. In children and adolescents, it is mainly due to chronic thyroiditis or radiotherapy for cervical cancer.

Objective and hypotheses

Assess clinical, etiological and evolutionary characteristics of subclinical hypothyroidism in children and adolescents

METHOD

This is a retrospective and prospective study of 25 cases of children and adolescents with subclinical hypothyroidism. All patients underwent a clinical examination, hormonal assessment: FT4, TSH, AC anti TPO , cervical ultrasound and lipid exploration
Clinical and laboratory tests were performed annually.

RESULTS

The average age is 8 years (6- 10) in children (8 girls, 5 boys) and 14.5 years among adolescents (7 girls and 6 boys) . The reason for consultation was
-In children: stature delay (50%) and goiter (50%).
-In Teenagers: Goiter (40%), signs of hypothyroidism (20%), a systematic exploration (40%) . . 60% of patients had a goiter with positivity for anti TPO AC.
Patients without goiter had no markers of autoimmunity
The clinical exam was normally except for a stature delay in 30% and asthenia in 10%. The lipid profile was normal in all cases. The mean TSH was 8,8mu / l (4,5 - 10)
Etiologically , it was a Hashimoto thyroiditis in 60% of cases and a post radiotherapy hypothyroidism in 15% of cases. No etiology was found in the other cases
Monitoring patients revealed after a mean follow of 6yrs the transition to frank hypothyroidism in 30% of cases, normalizing hormone function in 40% of cases and stabilization in the remaining cases

DISCUSSION

The main cause of thyroid enlargement in children and adolescents is Hashimoto's disease. The condition is more common in girls than in boys and in children with a family history of the disease or other thyroid disorders. Other than to the increase in volume of the thyroid, no other abnormality could not be detected until hypothyroidism appears. The management of Hashimoto's disease is exactly the same in all age groups. Over time, even years, the gland shrinks. . The thyroid hormone secretion may be normal at diagnosis of the disease, but it is recommended that the child be followed in the event that hypothyroidism would appear. Once initiated, the treatment with thyroid hormone should be taken throughout life.

Some children more likely to have Hashimoto's disease should be subject to regular monitoring, including children type 1 diabetes, Down syndrome , Turner syndrome or children who received radiotherapy

CONCLUSION

Subclinical hypothyroidism is a rare disease in the child and adolescent. Its development is characterized in most cases by a normalization of TSH and stability. In a few cases a frank hypothyroidism appears