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Endoped Abstract

Hyperthyroidism in Children

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Introduction

Hyperthyroidism is a complex clinical and biological manifestation due to an excess of endogenous or exogenous circulating thyroid hormones.

The main forms of hyperthyroidism in children are: Graves Basedow disease, toxic adenoma, toxic multinodular goiter [1,2]. Some clinical manifestations are characteristic of newborns and their immediate management is very important to prevent the effects of thyrotoxicosis on the development of the central nervous system and bone [3–5]. Frequently in children this disease is diagnosed by general practitioners [4,6].

Adverse reactions to antithyroid drugs are common but mild in most cases [7].

Material and Methods

The paper includes a statistical retrospective clinical study, cases of hyperthyroidism in patients aged between 4 and 18 hospitalized in the Pediatric and Endocrinology Sibiu for a period of 20 years (1999–2019). The study includes 40 patients. Clinical diagnosis of hyperthyroidism was made based on signs and symptoms of thyrotoxicosis classic. Laboratory diagnosis was based on: TSH, FT4, FT3, TPO, TRAb, thyroid ultrasound, in selected cases scintigraphy and radioiodine uptake. In addition, patients were evaluated in terms of neuropsychiatric disorders.

Results

Graves' disease is by far the most common form of hyperthyroidism in children (85% in our study). This pathology is mostly in girls (ratio girls/boys is 6/1). The onset of hyperthyroidism occurs in pre and postpuberty, much less in the small child. The most common clinical symptoms are tachycardia, goiter, weight loss, sweating, heat intolerance, neuro-psychiatric symptoms, exophthalmia, palpitations and tremors in our study group. Psychological and psychiatric examinations revealed an increased rate of patients with anxiety and emotional lability, somatogen background neurotic syndrome.

Exophthalmos was less severe in children than in adults with hyperthyroidism and slowly regresses under treatment. First-line therapy in hyperthyroidism in children and adolescents is with antithyroidian drugs (70%), with good results, with only two patients having relapsed. Surgical treatment was applied in 15% of patients in the group.

Conclusions

The occurrence of thyroid hyperfunction during growth and development requires a careful investigation and therapy. Therapeutic success in hyperthyroidism in children is based on the association of psychotherapy in those with psycho-emotional manifestations.

Thyroid ophthalmopathy was less common compared to adult data.

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