

# Combined pituitary hormone deficiency associated with Graves' disease

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## 1 INTRODUCTION

Graves' disease is a common etiology of hyperthyroidism. The association of Graves' disease and idiopathic combined pituitary hormone deficiency (ICPHD) is rare. We report the case of a patient followed for ICPHD who developed Graves' disease during follow-up.

## 2 OBSERVATION

A 13-year-old patient consults for stature delay. She had a family history of idiopathic hypogonadotropic hypogonadism in a 25-year-old brother.

On examination, her height was -3 SD with a bone age 2 years less than chronological age. The Insulin hypoglycemia test, performed after sex steroid priming, confirmed complete Growth Hormone (GH) deficiency as well as corticotropic insufficiency with inappropriate ACTH at 8.3 pg / mL. The thyroid workup, on the other hand, was normal. The pituitary MRI was without abnormality. The karyotype was normal.

The diagnosis of ICPHD was retained and the patient was put on Hydrocortisone and recombinant human GH with good response to rhGH treatment. She had her first period at the age of 15.

During follow-up, the patient presented with an acute adrenal crisis with symptoms of thyrotoxicosis at the age of 16. Anti TSH receptor antibodies were positive hence the diagnosis of Graves' disease was made. The patient was put on methimazole with good clinical outcome

## 3 DISCUSSION ET CONCLUSION

The patient had corticotropic and somatotropic insufficiency. The thyroid tests were monitored regularly in order to detect thyrotropic insufficiency in time. However, the patient developed Graves' disease during follow-up revealed by acute adrenal crisis, thus a rare association of ICPHD and Graves' disease.

## 4 REFERENCES

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