



USEFULNESS OF REEVALUATION OF GROWTH HORMONE SECRETION DURING PUBERTY

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INTRODUCTION

- Endogenous Growth hormone (GH) secretion physiologically increases during puberty.
- A correlation between GH levels and pubertal stages is stated. Therefore, it is possible that some patients with childhood-onset GH deficiency (GHD) normalize their GH secretion at puberty .
- So far no potential predictors of persistent GHD there are not assessed in patients during puberty.

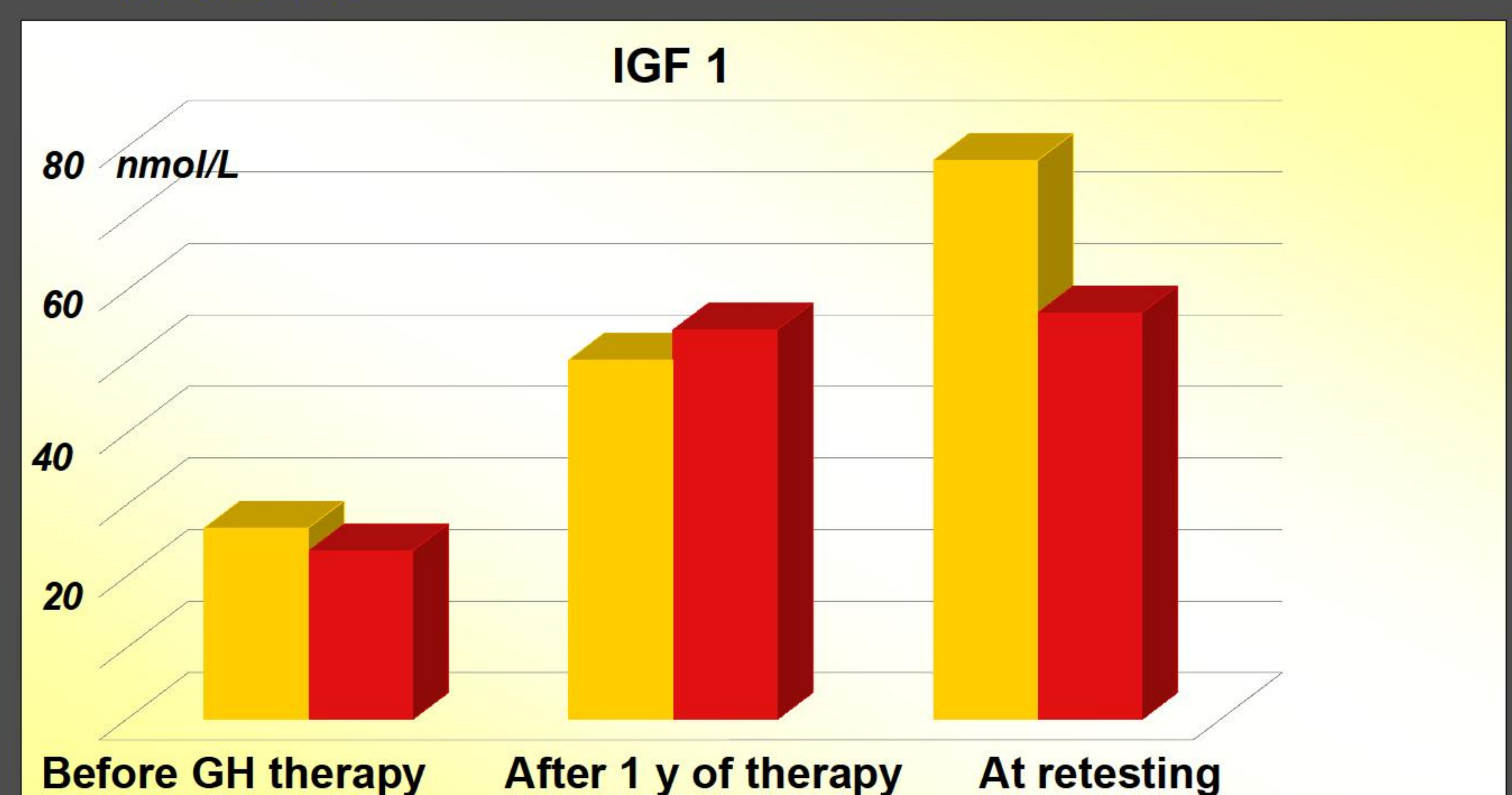
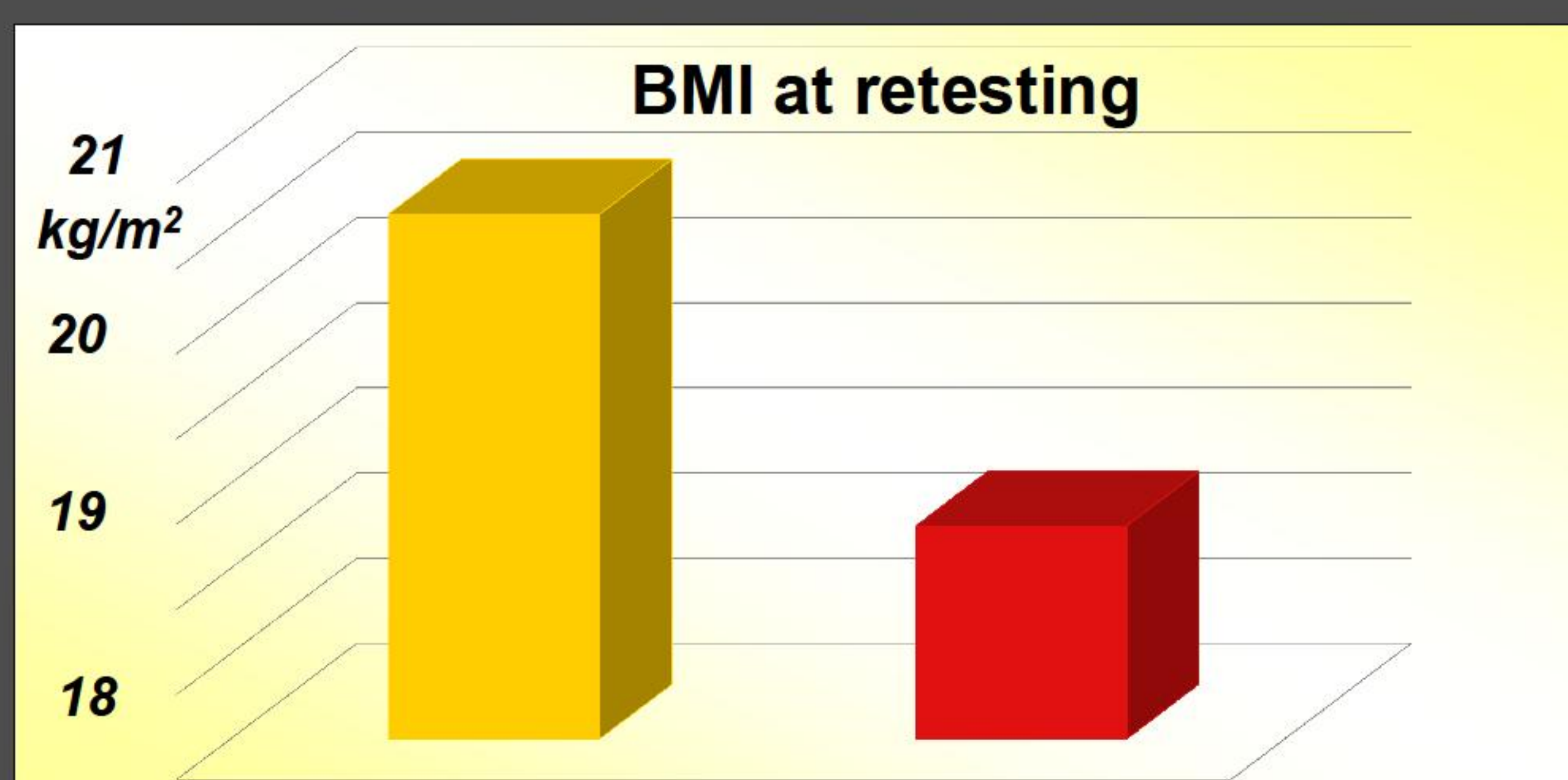
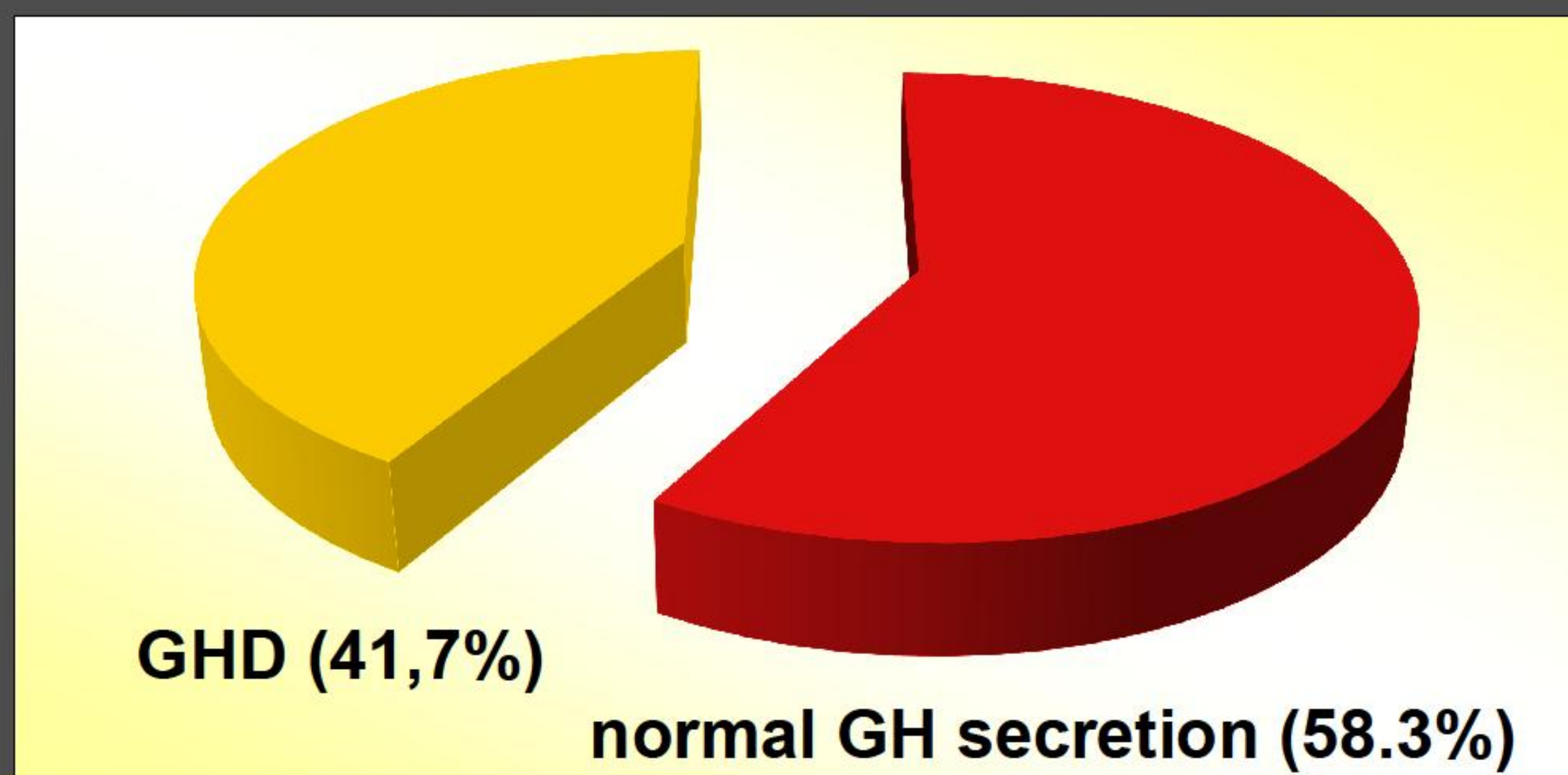
AIMS OF THE STUDY

- To evaluate the normalization of GH secretion during puberty in a cohort of GHD adolescents;
- To verify if it is possible to pinpoint some factors that might predict the GH sufficiency at puberty.

DESIGN

- 72 patients (40 M, 32 F) with history of childhood-onset GHD who had received >1 year of GH treatment and had reached the pubertal Tanner stage 3 were enrolled.
- All of them were submitted to arginine re-test to evaluate the GH secretion.
- Auxological and hormonal data at diagnosis and at reevaluation of GH secretion were analyzed.

RESULTS



- No predictive factors of GH sufficiency were identified.
- At the puberty onset, adolescents with sufficient GH secretion decelerate their growth velocity, whereas GHD adolescents maintain their regular and progressive growth.

CONCLUSIONS

- Most childhood-onset GHD patients acquire a sufficient GH secretion at puberty.
- Although no predictive factors of GH sufficiency are emerged, to retest GH secretion during puberty may be recommended, in particular in cases of GHD adolescents with a mild GHD at diagnosis.

