

# Growth hormone therapy assessment in growth hormone deficient patients during the transition period

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## Introduction and objectives:

GH treatment in severe GH deficiency during the transition period is a key matter. We assessed the outcome of 30 severe GH deficient (GHD) patients, treated until their final height, who participated in a structured transition program in a French University Hospital, between 1988 and 2014.

## Method:

**Population:** patients with severe and persistent GHD after pituitary reassessment.

10 isolated and 20 multiple pituitary hormone deficiencies.

**Mean age at transfer:** 17.4 ± 1.9 years.

**Data recorded** from pediatric and adult files: GH doses, IGF1, metabolic and bone status.

## Etiology of GHD (n=30)

Congenital deficiency: 16/30 (12 ectopic posterior pituitaries)

Brain tumors: 11/30 (5 Rathke's cleft cysts)

Radiotherapy-induced GHD for leukemia: 3/30

## Results:

### Follow-up

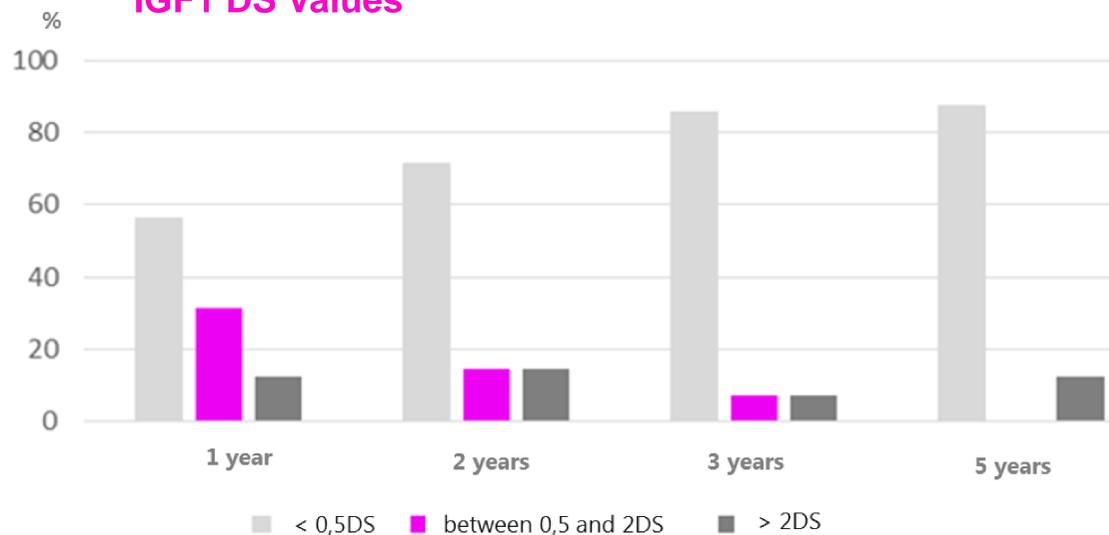
- **Median follow-up:** 3 years

- **25/30 (83.3%)** were still followed after 1 year and **19/25 (76%)** after 2 years

- **No patients lost to follow-up after 2 years.**

	1 year	2 years	3 years	5 years
<b>Treated patients</b>	17/25 (68%)	14/19 (73.6%)	14/16 (87.5%)	8/11 (72.7%)
<b>Lost to follow-up</b>	5/30 (16.6%)	2/25 (23.3%)	0	0

### IGF1 DS Values

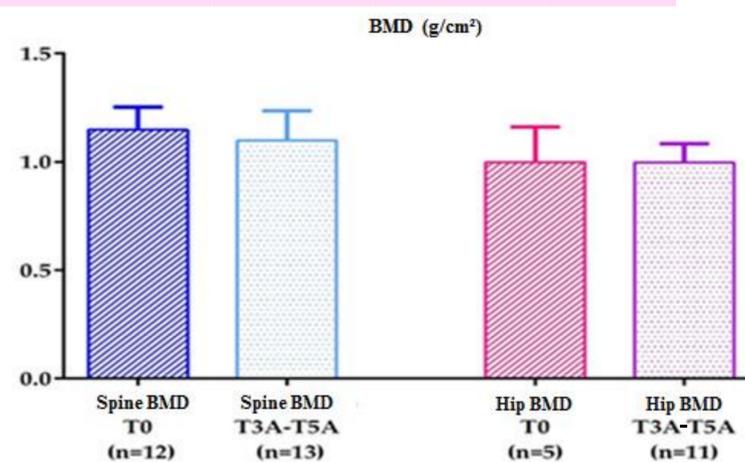


### Metabolic parameters

- **BMI** decreased for men (24.8 kg/m<sup>2</sup> vs 23.6 kg/m<sup>2</sup>), increased for women (26 kg/m<sup>2</sup> vs 29.2 kg/m<sup>2</sup>).

- **Bone status, glycaemia and lipid levels** were stable after 5 years.

	1 year	2 years	3 years
<b>IGF1 in the target [0.5 - 2 DS]</b>	5/25 (31%)	2/19 (14%)	1/14 (7%)
<b>GH doses (mg/j)</b>	1.2	0.9	0.8



## Conclusion

Among 30 severe and persistent growth hormone deficient patients, treated until their final height and having benefited from a structured transition program, the majority of them (8/11 i.e. 72.7%) are still treated 5 years after transition, pointing out the interest of an active collaboration between pediatric and adult teams. However, the insufficient initial and subsequent IGF1 levels emphasize the need to focus on patient education, through a motivational approach.

