Parent-reported psychological adjustment and health-related quality of life in children with growth hormone deficiency before and after six-month recombinant growth hormone treatment, in age-matched children with familial short stature and in normal-statured children.

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Background: parental perceptions represent a crucial and underexplored dimension in evaluating the psychological adjustment and health-related quality of life (HRQoL) of children with growth hormone deficiency (GHD). This study aimed to: i. assess the psychological adjustment and HRQoL of children with GHD and to examine the psychological impact of six months of recombinant GH (rec-GH) therapy, based on parental reports; ii. compare the results obtained in parents of children with GHD with those of parents of children with familial short stature (FSS) and parents of children with normal stature (NS).

Methods: parents of 10 children with GHD, of 15 children with FSS, and of 17 children with NS completed the Child Behaviour Checklist for Children (CBCL) and the Quality of Life in Short Stature Youth (QoLISSY) questionnaires. For the GHD subgroup, assessments were repeated after six months of rec-GH treatment.

Results: parents reported a comparable overall behavioural functioning across the three subgroups, with a trend toward greater emotional difficulties in the GHD subgroup—particularly in the withdrawal/depression subscale of CBCL. After 6 months of rec-GH therapy, CBCL scores suggested a partial normalization of emotional functioning according to the parents of children with GHD. However, conduct problems remained more pronounced compared to the NS and FSS subgroups. As far as HRQoL is concerned, there were no significant differences between the parents of the GHD and FSS subgroups in the QoLISSY; however, both subgroups reported a markedly lower QoL than parents of children with NS across Physical, Social, Emotional, Future, Effect, and Total domains. Following a six-month rec-GH treatment, the GHD subgroup continued to exhibit lower physical QoL scores despite an improved height velocity, suggesting that the six-month rec-GH therapy did not fully mitigate the perceived physical limitations.

Conclusions: this study provides an integrative evaluation of the psychosocial adjustment and HRQoL in children with GHD, FSS, and NS, emphasising the value of parent-reported outcomes.