(Mis)Perceptions of Height and Psychological Adaptation

CS2-14

Growth Hormone (GH) Treatment and Changes in Quality of Life

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The use of GH in non-GH-Deficient short children has been initiated and defended on the assumption that short stature leads to some form of suffering, which can be aleviated by growth promoting treatment and for which no other effective therapy is available. The evidence for these assumptions will be reviewed, particularly in children with idiopathic short stature.

The question whether short stature leads to suffering can also be formulated by the question whether it is a relevant risk factor in the context of other risk and protective factors associated with the biological makeup of the child and its immediate environment and social, economic and cultural context. There is a great diversity of study results, in terms of social competence, social functioning, behavior (externalizing and internalizing problems), body image, self image, cognitive functioning and school competence. Studies in young adults with a history of short stature in childhood have shown few effects on quality of life. In general, the impact of short stature appears modest, but may depend on the presence or absence of other risk and protective factors (sex, age, intelligence, parental attitudes, being teased, socio-economic status, prevailing cultural opinions, etc). The diversity of results appears related to methodological factors (generic versus instruments) and to the choice of study population. Similar considerations apply to the studies on the effect of GH on psychosocial parameters: in controlled studies generally no major changes have been observed in school competence, behavior, self image, body image, personality characteristics and cognitive functioning. The same applies to follow-up studies in young adulthood. The consequences of these findings for the approach to GH treatment in non-GHD short children, either with disorders with a well-established etiology (such as Turner syndrome and renal failure) or with less well defined disorders (ISS, intrauterine growth retardation) will be discussed.