The quality-of-life questionnaire QLS-H: validation of the French language version of the questionnaire in patients with growth hormone deficiency and collection of reference data in the general population

Abstract:
The QLS-H(c) (Questions on Life Satisfaction-Hypopituitarism) is a new quality of life (QoL) self-administered questionnaire addressing the complaints of adult patients with growth hormone deficiency. The French version of the QLS-H(c) (16 items) has been psychometrically evaluated during a randomized, open label study comparing two strategies of growth hormone (GH) replacement therapy. Seventy-three patients were included and received an 8-month GH replacement therapy. QoL was explored at baseline, 4 and 8 months using the QLS-H(c) questionnaire and the Nottingham Health Profile (NHP) reference scale. Acceptance of the QLS-H(c) was excellent as 92% of the questionnaires were suitable for analysis. All the items demonstrated good selectivity. The homogeneity of the questionnaire was confirmed (Cronbach’s alpha, 0.87). The external validity construct was assessed and confirmed using the NHP scores. Sensitivity to change was confirmed. Following an 8-month replacement therapy, the perception of the QoL assessed with the QLS-H(c) questionnaire was significantly improved, irrespective to the treatment strategy. Finally, redundant items of the questionnaire were removed. As a result, the final version of the QLS-H(c) contained 9 items. In a parallel study, reference data of the
QLS-H(c) (9 items) were collected from a representative sample of 989 subjects from the French population. With these reference ranges, algorithms to calculate Z scores adjusted for age and gender were developed as a measure for the deviation of patients' scores from those of the general population, and also to evaluate changes along time. In summary, the French version of the quality of life QLS-H(c) questionnaire is a relevant, validated investigational tool for the evaluation and follow-up of an adult patient with growth hormone deficiency.