

Effects of eight months treatment with graded doses of a growth hormone (GH)-releasing peptide in GH-deficient children

Mericq, Verónica

Cassorla, Fernando

Salazar, Teresa

Avila, Alejandra

Iñiguez, Germán

Bowers, Cyril Y.

Merriam, George R.

Stimulation of pituitary GH secretion with administered GHRH can be effective therapy for those GH deficient (GHD) patients whose disorder results from insufficient endogenous GHRH secretion. We have previously shown that most such patients also respond acutely to the GH-releasing peptides (GHRP's), which have a different mechanism of action from GHRH, with release of GH. In this study we tested whether the GH response to a newer GHRP, GHRP- 2, would be sustained over time. Six prepubertal children with GHD and growth failure received stepwise increasing sc doses of GHRP-2, at 0.3, 1.0, and 3.0 μ g/kg/day, in successive 2-month treatment periods, with monitoring of overnight 12 h episodic GH secretion and toxicity measures at the end of each period. During a fourth 2-month period, they received 3 μ g/kg GHRP-2 together with 3 μ g/kg sc GHRH. Serum levels of IGF-I and IGFBP-3 were also measured, and stadiometer height measurements were recorded. GHRP-2 administration produced a dosewise in