

IGF-I sensitivity in small for gestational age children Sensibilidad a IGF-I en niños pequeños para la edad gestacional

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Background: The lack of catch up growth (CUG) in small for gestational age (SGA) children may be related to a reduced sensitivity to insulin growth factor 1 (IGF-I). **Aim:** To assess the sensitivity to IGF-I in small for gestational age children, measuring basal and post IGF-I nocturnal profile of growth hormone (GH). **Patients and methods:** We studied 34 prepubertal SGA children aged 4 to 11 years. Twenty three had CUG and 11 did not have CUG. As an IGF-I sensitivity test, nocturnal GH levels were measured every 20 minutes from 23:00 h to 07:00 h, both under baseline conditions and after the administration of a subcutaneous bolus of 1 mg/kg/body weight of the IGF-I + IGFBP-3 complex (Somatokine®). **Results:** At the time of the study, the Z scores for height among children with and without CUG were -1.55 ± 0.22 and -3.24 ± 0.28 , respectively ($p < 0.0001$). There were no statistical differences between CUG + vs CUG- patients in mean basal GH (6.6 ± 0.5 and 5.6 ± 0.6 ng/ml, respectively). After