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Growth Retardation in Thalassemia Major Patients

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ABSTRACT Regular blood transfusion followed by iron chelation therapy is just a supportive treatment for thalassemia major which is associated with serious complications. Growth disturbances are a major clinical feature of untreated patients with thalassemia. The increasing mean survival age is indicative of the fact that modern therapies are generally safe and effective but it is becoming increasingly clear that as thalassemic patients approach the age of puberty, many develop growth retardation and pubertal failure. The main objective of present study was to examine longitudinally the growth pattern of thalassemic patients on hyper-transfusion regimen over a period of three years and to document disproportion in body segments. Material and Methods: Height, weight, sitting height vertex, trunk and leg length of 90 patients (57 male, 33 female) aged between 2 and 18 years were measured every two months over a period of 3 years. Results: This study supports the fact that thalassemic patients are short, have low rate of growth and BMI and have either delayed or absent pubertal spurt, which is related to low hemoglobin and high ferritin levels and sub-optimal iron chelation therapy. Growth faltering sets in at a much younger age and becomes apparent by 8 years of age. Poor socio-economic background compounds the problem.

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