

## Sex Steroids and Somatic Growth in Childhood

This is a short but provocative summary of the linear growth characteristics of 18 anatomically or functionally gonadal children with normal sex chromosomes, in an attempt to determine the importance of sex steroids to prepubertal growth. The children in this study included those with gonadal agenesis, gonadal dysgenesis, vanishing testes syndrome, surgical gonadectomy, gonadal destruction from radiation and chemotherapy, and biosynthetic defect in sex steroid production (17  $\alpha$ -hydroxylase deficiency). The gonadal status of these children was confirmed after surgical exploration, by determina-

tion of luteinizing hormone and follicle-stimulating hormone values, and plasma estradiol levels.

None of the 18 patients studied had heights or growth velocities greater than 2 SD below the mean of normal children. Thus, the authors suggest that gonadal steroids do not influence somatic growth during childhood and that it is highly unlikely that estrogen deficiency is responsible for growth failure of girls with Turner's syndrome.

Campos S, MacGillivray M. *Am J Dis Child* 1989;143:942-943.

**Editor's Comment**—*This short report is interesting and provocative. It stands, however, in sharp contrast to studies in pubertal children. To confirm these findings, it would be useful to evaluate a larger group of children, more homogeneous as to diagnosis. In addition, it is not clear that all the patients had completed their growth at the time they were studied. Hence, it would be useful to determine the effect of full physiologic replacement of sex steroids on final height in similar patients.*

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