

Testolactone Treatment in Precocious Puberty

Results are encouraging in these McCune-Albright syndrome patients

Five girls aged 1-4 years with precocious puberty and the McCune-Albright syndrome received 2 months' treatment with testolactone 20 mg/kg initially, increased over 3 weeks to a maximum of 40 mg/kg followed by a 2-month drug-free period. Treatment was then continued to 6 months followed by 6 months of no treatment. Plasma oestradiol levels decreased from 163 before to 32 pg/ml during treatment and rose to 182 pg/ml after treatment discontinuation with a similar pattern observed in oestrone levels. Ovarian volume decreased during treatment (4.8 vs 2.6ml) and rose after drug discontinuation (9.2ml). Basal gonadotrophin levels were suppressed in all patients, and gonadotrophin response to luteinising-hormone-releasing hormone remained below normal prepubertal values during treatment although an elevated response was observed. Growth rates, assessed in 3 patients, fell during treatment and rose again after discontinuation with the mean rate of bone maturation showing a similar trend. Menstrual bleeding, present in 4 patients, showed a decreased frequency which was significant in 3 of the 4. One patient demonstrated reduced breast development and pubic hair stage was diminished in another.

Transient diarrhoea and abdominal cramps in 1 patient resolved on temporary dosage reduction.

Feuillan PP, Foster CM, Pescovitz OH, Hench KD, Shawker T. New England Journal of Medicine 315: 1115-1119, 30 Oct 1986