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CONGENITAL VIRILIZING ADRENAL HYPERPLASIA (CVAH) DUE TO 21 HYDROXYLASE DEFICIENCY, RESULTS OF THERAPY WITH CYPROTERONE ACETATE (CA).

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Ten prepubertal patients (6 girls, 4 boys) suffering of CVAH were submitted to treatments with CA at the dosages of 63 ± 21 (SD) mg/m²/day over periods of 14-52 (mean 29) months. Results were compared with those obtained from the same patients, immediately before therapy with CA, over periods of 12-41 (mean 24) months. At the beginning of treatment with CA, chronological (Ch) ages were 5 to 10 years, heights were 102.5 ± 9.2 % of normal heights for Ch ages, weights 117 ± 21 % of normal weights for heights and bone (B) ages 6 to 92 (mean 49) months over Ch ages. CA induced a decrease in growth velocity from $6.9 \pm .66$ (SEM) to $4.3 \pm .54$ cm/year ($p < .01$) and in bone maturation from $2.4 \pm .76$ to $.35 \pm .11$ years/Ch year ($p < .05$). Subsequent improvements in growth rates occurred with decreases in B age/height age ratios from $1.42 \pm .09$ at the beginning to $1.23 \pm .06$ at the end of the periods of CA treatments ($p < .05$). Weight/height ratios remained unchanged. In spite of reduced cortisol treatments from 15.4 ± 1.23 , before, to $12.24 \pm .72$ mg/m²/day, during CA treatment, ($p < .05$), 17 hydroxyprogesterone (17OHP) and testosterone (T) plasma levels decreased from 62 ± 9.8 to 22 ± 7 ($p < .01$) and from $.42 \pm .07$ to $.17 \pm .03$ ($p < .05$) respectively. When compared to normal values for B ages, plasma DHA and Δ_4 androstenedione were either normal or subnormal. Mineralocorticoid therapies were unchanged and plasma renin activities identical. In conclusion, two main effects of CA appear to be of interest in the treatment of prepubertal patients with CVAH. 1) the antiandrogenic effect is demonstrated by the improvement of bone maturation 2) the inhibition of ACTH production by the decreases in 17OHP levels. The former effect is obvious in some cases of incompletely suppressed T. levels.

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ANTIANDROGENS IN THE TREATMENT OF HIRSUTISM.

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We have compared the effects of two antiandrogens in the treatment of hirsutism: cyproterone acetate (CA 50 mg, 5th-16th day) combined with ethinyl oestradiol (EE2 50 mcg, 5th-26th day) and spironolactone (SA 100 mg, 5th-26th day). Both treatments have been reported to correct similarly hyperandrogenism and hirsutism. A prospective study of 12 months was performed. Hirsutism was assessed every 3 months using the Ferriman and Gallwey scoring system, plasma androgens were measured with the same intervals. The clinical effects of the CA and EE2 combination (n=35) was good, improvement of the hirsute score was present in 2/3 of patients. All patients showed a decrease of the plasma androgen levels (Δ testosterone being 36%, Δ androstenedione 45%, Δ dihydrotestosterone 26%, $\Delta 5\alpha$ androstanediol 57%, Δ dehydroepiandrosterone 56%, $\Delta 5$ -androstenediol 33%, Δ dehydroepiandrosterone sulphate 26%). Clinical and biochemical results of SA treatment (n=12) were disappointing. Improvement of hirsutism was limited. Only 5/12 patients experienced any improvement. A normalization of the score being attained after 9 months of treatment in only 2 cases with very mild hirsutism. 6/12 patients complained of polymenorrhea. One patient having previously oligomenorrhea went into frank amenorrhea. SA treatment had minimal effects upon the androgen plasma level. Testosterone, androstenedione, dehydroepiandrosterone, dehydroepiandrosterone sulphate, 5 α -androstenediol and dehydrotestosterone did not change. Only the 5 α androstanediol level was slightly lowered. These results suggest that SA in the dose used has only a very weak antiandrogen effect. Other authors report favourable results for SA. The reason for the discrepant results is not clear but may be related to the relatively low dose of SA used.