

## Impact of congenital adrenal hyperplasia and glucocorticoid treatment on the final size and gonadal function: EP-43

### INTRODUCTION

Congenital adrenal hyperplasia (CAH) are genetic diseases with a deficit of one of the enzymes of steroidogenesis (21 hydroxylase OH, 90%). The consequences of the adrenal hyperandrogenism that results are observed when the treatment is not undertaken precociously

### AIM

Study the impact of CAH and or Treatment by glucocorticoids on the final size and the gonadal function in girls

### MATERIALS AND METHODS

25 CAH's patients ( 21-hydroxylase deficiency n = 25 , 11  $\beta$ -hydroxylase n: 3) with completed puberty were studied to assess the Impact of congenital adrenal hyperplasia and glucocorticoid treatment on the final size and gonadal function

### MATERIALS AND METHODS

All patients underwent interrogation and clinical examination specifying: The age and size at diagnosis and at the end of puberty The age at onset of puberty and ménarchie in girls . The existence of PCOS in girls Treatment compliance

The sizes were compared to the curves of Sempé and the target size  
Pubertal development was compared to Tanner stages  
The diagnosis of PCOS was established on the basis of criteria of Rotterdam

### RESULTS

The mean age at diagnosis and initiation of treatment was:

5 $\pm$ 2,4 years old (3- 9) .

The mean final height was 150  $\pm$  1,2 cm for girls (n :18): -2DS/ M Sempé; -1,6 DS/ TC

and 158  $\pm$  2 cm for boys (n = 7): DS/ M Sempé; - DS/ TC

20% of patients have early puberty. In the remaining cases, delayed puberty was observed with a mean age of : 14  $\pm$  0.1 years in girls

15  $\pm$  1.4 years for boys.

Mean age of ménarchie in girls is 17  $\pm$  1.2 years

All girls had polycystic ovarian disease.

70% of patients had a persistent hyperandrogenism . ; 50% of patients were tightly controlled, ; 25% underdosed

25% overdosed ; 30% have an android obesity

### DISCUSSION AND CONCLUSION

Delayed diagnosis and poor compliance in our patients have resulted in a significant impact on growth in stature, pubertal development and gonadal function.

The introduction of routine neonatal screening for CAH in our country and more éfficace care of pathology will improve the functional prognosis of patients

Glucocorticoid replacement therapy may have a deleterious effect on body composition, on bone and metabolism when not taken properly

Compliance to treatment and regular monitoring of patients can avoid these complications

