INTRODUCTION

Impact of suppressive therapy with LH RH analogues is more stop the premature pubertal development, reduce the acceleration of bone maturation that compromises the final size and avoid psychological disturbances caused by hormonal imbalance.

AIM

Study the effects of treatment on pubertal development, bone maturation and evolution of the size during and at the end of treatment and final height in 15 patients with central precocious puberty treated by triptorelin.

SUBJECTS AND METHODS

20 children (chronological age at diagnosis: 8 ± 1.8 years) at the end of treatment (11 ± 0.1 years) and the final size (15.9 ± 2.5 years) were treated for a central precocious puberty. The selection criteria for this study were treatment of central precocious puberty by Decapeptyl® during two years or more. We assessed pubertal status, size, bone maturation at the beginning and the final size after stop taking treatment and its side effects.

RESULTS

At the beginning of treatment, pubertal development was S3 (S2- S 4) , size +2.1 ± 0.8 DS / TC) and AO /10.5 ± 0.8 years. Under treatment, breast development decreased and bone maturation decelerated on the first year. Average bone age lead after two years of treatment: 1.4 years (6 months- 2 years) vs 2.5 ± 1 years at the start of treatment. The mean final height was 158.2 ± 6.6 cm; (-1.5 ± 0.1 DS / TC)

RESULTS

Minor side and reversible effects were observed: Local pain at the points of injection (40% of cases) bleeding after the first injection: 20% Headache and visual disturbances transitioirs 10% hot flashes 15%. Menstrual cycles were normal after the cessation of treatment in all patients. The effect on reproduction could not be assessed in our patients.

DISCUSSION AND CONCLUSION

Hormone treatment of Early precocity puberty is based on the use of agonists GnRH at high doses. Their continuous administration causes suppression in plasma of gonadotrophins and sex steroids leading to a freination development pubertal.

Treatment stabilizes or regressed pubertal development and decreases bone maturation rate. However when indicated late, the prognosis size is not satisfactory. Early diagnosis and therapeutic treatment of central precocious puberty by agonist of the GnRH analogue allowed a best gain in size. In addition the effects of the GnRH analogue are reversible, reproductive function is not altered.

(A)Before and after (B)decapeptyl