



EFFECT OF TRIPTORELINE IN PATIENTS WITH CPP

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INTRODUCTION: Precocious puberty is defined by the development of secondary sexual characteristics before the age of 8 in girls and before the age of 9 in boys. If not diagnosed and treated at an early stage, precocious puberty can compromise final adult height and trigger psychological disturbances.

Gonadotropin-releasing hormone analogs (GnRHa) contributes to achievement of target final height by reducing the acceleration of bone maturation

OBJECTIVES: To analyze clinical and para clinical features in patients with precocious puberty, effect of triptoreline in improvement of secondary sexual characteristics and predicted adult height (PAH) after 12 months of treatment.

Subjects and Method: Case-series study included 79 patients with precocious puberty at Children's Hospital 1 up to July 2016.

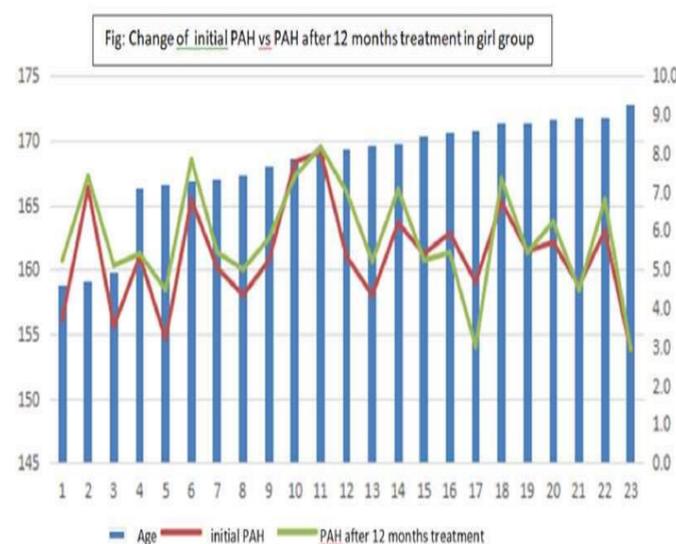
RESULTS: After 12 months of Triptoreline treatment, secondary sexual characteristics reduced or ceased, acceleration of bone age decreased, sexual hormonal levels (FSH, LH, Estrogen/testosterone) fell below puberty range

Clinical characteristics and investigations at baseline and after 12 months

	Pretreatment (n = 32)	12 months (n = 32)	p
CA	6,5 ± 2,5	7,5 ± 2,5	
BA	9,0 ± 2,4	9,7 ± 2,3	
Height (cm)	123,7 ± 18,9	130,3 ± 16,3	
Height SDS'	1,27 ± 1,13	1,26 ± 0,96	
Breast stage(Tanner)	2,4 ± 0,4	2,4 ± 0,8	
Menarche	7/25	0/25	
Pubic hair (Tanner)	1,42 ± 0,5	1,03 ± 0,42	
Penis length (cm)	6 ± 1,4	5,9 ± 1,3	
V testes (ml)	8,2 ± 2,9	7,2 ± 2,0	
Testosterone	298,9 ± 165,4	3,5 ± 2,5	0,00*
Estradiol	49,6 ± 59,9	9,3 ± 6,7	0,02*
FSH (U/L)	5 ± 3,2	2,3 ± 4,8	0,00*
LH (U/L)	5,0 ± 8,0	0,8 ± 1,0	0,00*

PAH: pretreatment and after 12 months in girl group

	Pretreatment (n = 25)	12 months (n = 25)	P
PAH(< 8 years)(cm)	163,4 ± 7,7	164,7 ± 7,6	0,015*
PAH(> 8 years)(cm)	161,4 ± 3,76	162,2 ± 3,48	0,208*



RESULTS: We analyzed PAH of twenty-five female with initiation of treatment before the age of 8, PAH improve significantly before and after 12 months of treatment in this group 163.4 ± 7.7cm and 164.7 ± 7.6cm, respectively (p < 0.05).

CONCLUSION: Triptoreline decreases secondary sexual characteristics such as menarche, breast development, pubic hair, penis enlargement, acne, body odor and reduces the concentration of hormones (FSH, LH, Estradiol, Testosterone). In addition, Triptoreline increased PAH resulting in improving final adult height.

E. Gt\$bb et al. (2016), "The Influence of GnRH Analog Therapy on Growth in Central Precocious Puberty", *Adv Clin Exp Med*, 25 (1), 27-32 S. Wacharasindhu, et al (2012), "Does GnRH agonist enhance the final adult height in girls with precocious puberty", *Asian Biomedicine*, 6(5), 771-77732 Eun Young Kim (2015), "Long-term effects of gonadotropin-releasing hormone analogs in girls with central precocious puberty", *Korean J Pediatr*, 58(1), 1-7

