35

BONE AGE (BA) AT THE END OF TREATMENT IN CENTRAL PRECOCIOUS PUBERTY (CPP): IMPACT OVER STATURE. L E Calliari; A G. Rodrigues; C Refinetti; A Ferroni Jr.; E Cechinel; S Domenice; B B.Mendonça; O Monte; C A. Longui.
Unid.Endocrinologia Pediátrica - Santa Casa SP; Disciplina de Endocrinologia - FMUSP.

We studied 15 girls and 1 boy with CPP, divided in 2 groups according to BA in the moment of withdrawn of treatment (tto). In group A the tto was stopped with BA between 11 and 12.9 years and group B between 13 and 15 years. BA and stature were obtained in 3 different occasions: at beginning, at the end of tto and in the last evaluation (mean 2 years after tto was stopped). Stature was expressed in standard-deviation score related to BA: Zs. Results: In group A the differences between patients Zs and parents stature were: 0.003, -0.11 + respectively in the first, second and third evaluation. In group B these values were -4.53, -1.12, -0.53.

	GROUP A			GROUP B		
	Z ini	Z tto	Z fin	Z ini	Z tto	Z fin
Mean	-0.68	-0.54	-0.40	-2.75	-1.50	-1.08
SD	0.90	0.86	1.19	1.10	1.34	1.36
Median	-1.15	-0.30	-0.39	-2.87	-1.70	-1.20

Z ini=Zs from the beginning of tto; Z tto=Zs at stopped tto;Z fin=Zs at last evaluation.
Variation of Zs >0.5 was considered significant. In group A 2/7 patients improved their Zs between the first and second evaluations, and 2/7 between the second and third. There was a decrement of Zs in 1/7 patients in each period. In group B 4/8 patients improved their Zs between the first and second evaluation and 6/9 between second and third. Decrement of Zs was observed in 1/8 patients between first and second evaluation and 1/9 between second and third. There was a greater tendency to improve the Zs in group B in relation to group A, suggesting that premature treatment whitdrawn can compromise the final stature.

36

MORPHOLOGY AND FUNCTION IN PATIENTS WITH UNILATERAL VARICOCELE(Va). CA. Longui, SG. Veloso, VRF. Kaneko, AM. Domingues, LEP. Calliari, O. Monte. Pediatric Endocrinol. Unit, Santa Casa Sao Paulo, Brasil.

Patients with unilateral varicocele, grade 3, (n=11), were analyzed to study if there are morphological or fuctional alterations in the testes. They were classified according to genital stage given GnRH (100 mcg) and hCG (50 U/kg/dose, 5 days) and underwent bilateral testicular biopsy. Testicular volume (TV) was measured and differences > 2 cm3 were considered significant Basal testoterone (T) and peak LH, FSH and T were similar to the control group. There was no difference in basal LH and FSH between groups G1, G2, G3+4. Tubular diameter (TD) and area (TA) are showed in the table.

		TESTICULAR VOLUME-cm3 (VA=N)				TESTICULAR VOLUME-cm3 (VA<N)			
		Tubular		Tubular		Tubular		Tubular	
genital stage	PAT	Diameter N	Diameter Va	Area N	Area Va	PAT	Diameter N	Diameter Va	Area N	Area Va
G1	A	30.3	30.6	874	967					
	B	23.9	24.1	760	616					
G2	C	32.3	39.1*	1036	964	G	57.0	63.9*	1664	2218
	D	43.9	41.2	3676	1511	H	65.7	62.3*	2607	2590
						I	54.7	58.8*	1552	1751
G3+	E	42.8	44.0	920	945	J	58.6	66.9*	1868	1928
G4	F	50.0	38.8*	1458	1594	L	62.9	89.0*	2262	2301

In the five cases with decreased testicular volume, there was a higher TD on the Va side. Six patients didn't have a reduction in testicular volume and only two had a difference in TD between both sides. There was a tendency for a decrease in testicular volume and an increase in TD advancing pubertal development.

37

NON-CLASSICAL 3-β-HSD DEFICIENCY DUE TO POINT MUTATION IN THE TYPE II 3-β-HSD GENE. **Russell AJ., Mendonça BB., Vasconcelos-Leite M., Shackleton C., Arnhold IJP., Bloise W., Wajchenberg BL., Nicolau W., Sutcliffe RG.. Department of Genetics, University of Glasgow, Glasgow, Scotland; Gonads and Intersex Unit, Div. of Endocrinology, Univ. of São Paulo, Brasil; Univ. of Rio Grande do Norte, RN, Brasil.**

Congenital adrenal hyperplasia due to 3β-HSD deficiency may be classified in 2 clinical subtypes: the classical form- with or without salt-loss and a non classical form described in pubertal hirsute females and in girls with premature pubarche. Recently the complete structure of the two human 3β-HSD genes (type I and type II) have been characterized. The type II gene encodes the 3β-HSD enzyme in the adrenal glands, ovary and testis whereas the type I gene encodes the 3β-HSD enzyme in the placenta and peripheral tissue. We describe here the first case with non classical 3β-HSD deficiency due to a point mutation in 3-β-HSD type II. The patient, a 5-year-old white girl presented, with pubic hair, acne and normal external genitalia. Her parents were not consanguineous and denied similar cases in the family. CA 5.3 yrs. Height 111 cm (+0.1 SD) Weight:23 kg; Bone age:5.75 ys; Breasts:Tanner I; Pubic hair: Tanner III.

TIME	DHEAS ng/ml	DHEA ng/dl	17OHP ng/dl	17 PREG ng/dl	17PREG/ 17OHP	F µg/dl	Δ4-A ng/dl	T ng/dl
0'	540	930	780	4500	4.8	37	140	55
60' after ACTH	-	1080	1100	-	-	63	120	63
N.B. values(x±sd)	31± 23	76±36	30 ±21	41± 20	1.8± 0.8	13± 5	34± 21	10± 6

The ACTH test (25 IU iv) found normal cortisol levels and high levels of Δ^5-steroids: DHEA,17PREG and 17PREG/17OHP ratio.The Δ^4-steroids 17OHP, Δ4-A and T were also elevated. 24 hours basal urinary steroids were analyzed by gas chromatography and revealed elevated pregnenetriol(5PT)=715 µg/24hs (NL:80-352) and 5PT/THE+THF+5αTHF ratio=0.96 (NL:0.05) confirming the 3β-HSD deficiency. The treatment with DEX 0.2 mg reversed all the steroid abnormalities.The 4 exons of the type II 3β-HDS gene were amplified by PCR and screened for mutations by denaturing gradiente gel eletrophoresis (DGGE). DGGE detected a mutation in exon 3 of 3β-HSD type II. Sequencing showed the mutation to be a single missense mutation of GCC→ACC in codon 82 leading to the substitution in the affected patient of threonine for the normal alanine. The patient is homozygous for the mutation and her parents are both heterozygous. We conclude that non-classical form of 3β-HSD deficiency could also be caused by point mutation in 3β-HSD type II gene as in the classical form.