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ЭНДОКРИНОЛОГИЧЕСКИЙ НАУЧНЫЙ ЦЕНТР

Testicular adrenal rest tumors and Sertoli cell function in adolescents with CAH

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Background: Infertility is one of the major problems in adult males with congenital adrenal hyperplasia (CAH), associated with the development of testicular adrenal rest tumors (TART). Sertoli cell dysfunction could be diagnosed not only in adults but in adolescence.

Objective: To study Inhibin B and AMH levels in adolescents with CAH and TART and its diagnostics value in access of Sertoli cell function.

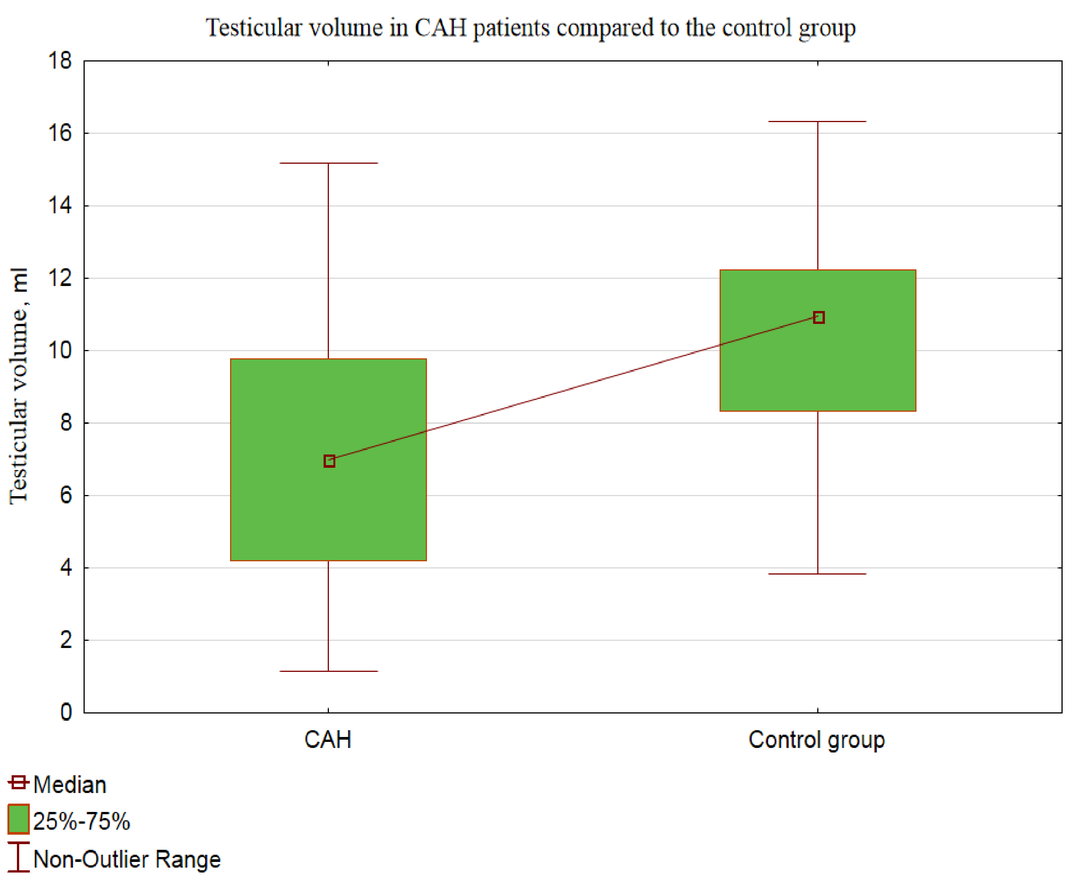
Patients and methods: We studied 28 CAH (16 with salt-wasting form (SW) and 12 simple virilizing (SV) form) and 18 healthy adolescents. TARTs have been detected in 7 CAH patients with SW form. CAH patients were divided into 2 groups according to TART development.

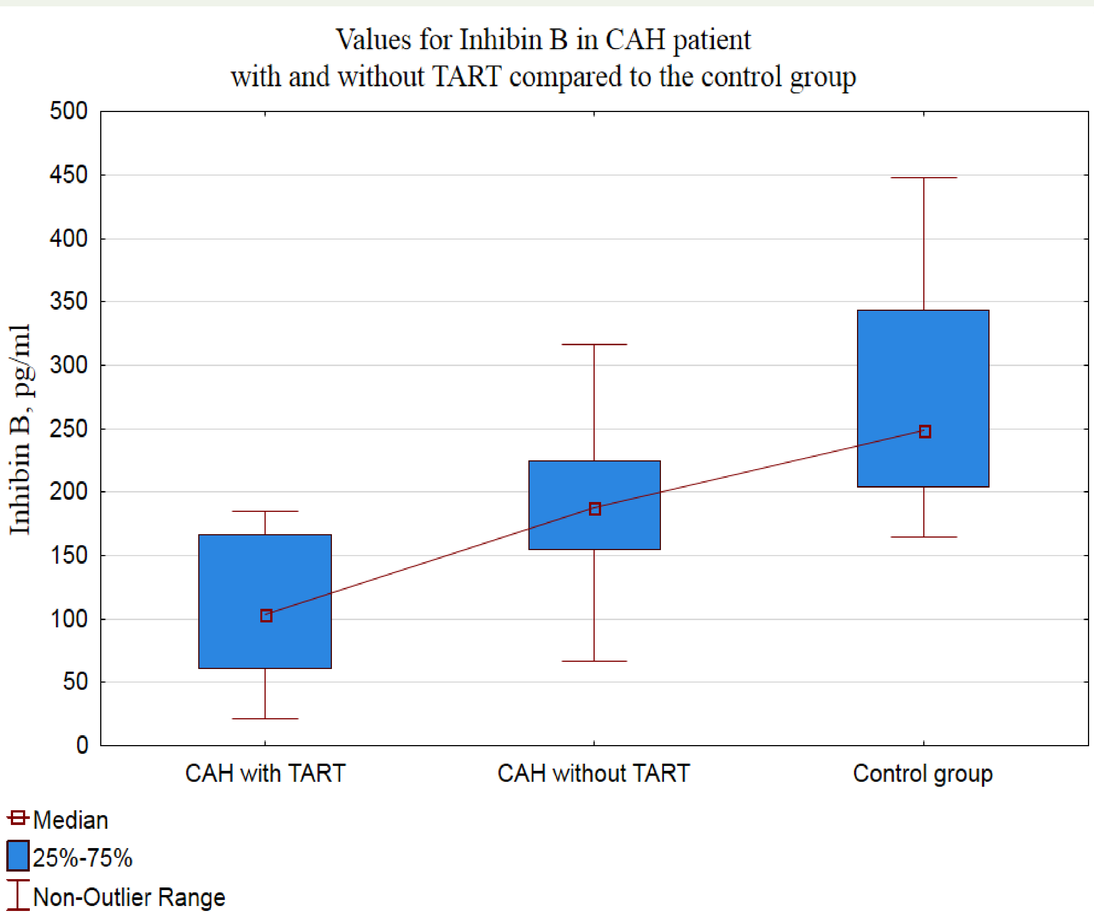
CAH and control groups were comparable in chronological age (P= 0.61) and puberty stage (P 0.61). CAH patients with and without TART had no differences in chronological age (P= 0.53), puberty stage (P 0.72) or testicular volume (p=0.11).

Results: Patients with CAH had lower testicular volume compared to the control group (P=0.002). Lower values for Inhibin B (P=0.003) but not AMH (P=0.6) were observed in the CAH patients. Inhibin B was significantly lower in patients with TART (P=0.02) in comparison to the patients without TART. There were no differences in AMH values between patients with or without TART. (Table 1).

Table 1

	Patients	Age, yrs.	Testicular volume, ml	Inhibin B, pg/ml	AMH, ng/ml
CAH with TART	7	14,55 [10.41;17,93]	5.98 [3.79;6.84]	103.15 [60.71;166.10]	8.11 [4.07;13.17]
CAH without TART	21	12.82 [11.73;15.13]	8.37 [4.48;10.61]	187,45 [154.97;224.26]	8.16 [6.47;21.6]
Control group	18	14.50 [14.00;17.00]	10.95 [8.33;12.24]	249.12 [204.04;343.19]	8.38 [5.81;10.00]





Conclusions: Low levels of Inhibin B in CAH patients indicates Sertoli cell dysfunction especially in patients with TART.