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THE ROLE OF CORTISOL IN SKIN-DISXROMY

Abstract
Cortisol is a corticosteroid hormone or glucocor ticoid produced by the adrenal gland. Cortisol can weaken the activity of the immune system. The primary control of cortisol is the primary gland, peptide, ACTH.
Key words: cortisol, disxromy

Cortisol – is a main hormone of adrenal cortex. Clinic view appeared under the influence of cortisol resulted in diffusion of protein and lipids in peripheral tissues. The level of this hormone hesitates between 351,2 nmol/l and 380,4 nmol/l. The level of cortisol in patients with vitiligo of light degree was 372,2 nmol/l and that was 1,8% more than test indicators. The level of cortisol was defined to increase, while the concentration of AKTH in blood decreased by 9,7% compared to healthy people. In the process of convex vitiligo the level of cortisol was defined to increase by 13,6%. Table 1.

Results of coorelation analyses between MSH and AKTH in patients with vitiligo

Indicators	Research groups											
	Control (n=40)			Light(n=31)			Medium (n=48)			Expressive (n=12)		
	n	r	rs	n	r	rs	n	r	rs	n	r	rs
MSH AKTH	32	0,48	0,56	OQ /O	0,51	0,57*	36	0,43	0,39	11	0.52	0,50*
MSH (cortisol)	37	-	-.1	28	0,27	0,29	35	-0.31	-.0,36	11	-0,42	-0,34
AKTH (cortisol)	34	0,21	0,36	26	0,41	0,39	42	-0.38	-0,37	10	-0,37	-0,48

Note: n- numbers of comparison * differences of accuracy

Such change merely is explained by functional condition of hypotolama hypofizar system in vitiligo (1,2,3). We have conducted correlation between MSH, AKTH and cortisol in different activity of vitiligo process. The correlation between MSH and cortisol hasn't been defined in healthy people. There was defined a positive correlation between MSH and cortisol in patients with light vitiligo but opposite one in patients with corvex vitiligo (4,5).

In the study of the level of cortisol this hormone was determined to decrease in fibroepitelial nevus and Setton nevus. Thus, average indicator was 359,3 nmol/l in fibroepitelial nevus, 343,9 nmol/l in Setton nevus, 365,4 nmol/l in control ($p<0.05$)

Table 2. The level of cortisol in blood in patients with hypepigmentation

Groups for test	Cortisol nmol/l
Test (n=40)	365,4 (328,5 – 403,6)

Intradermal nevus (n=37)	366,0 (319,7- 413,8)
fibroepitelial nevus (n=32)	359,3 (318,9- 400,0)
Setton nevus (n=18)	343,9 (316,5-371,4)
Melazma (n=57)	355,1 (324,0-279,5)

Slight decrease of cortisol has been noted 2.8% in patients with melazma. The level of cortisol hasn't changed that much in patient with intradermal nevus and like control the level of cortisol decreased by 41% in patients with pigment nevus and 14% in patients with melazma.

Table 3. Results of correlation analyses between hypofiz-adrenal gland system hormones in patients with hyperpigmentation

Indicators	treatment gruops								
	Control (n=40)			Pigment nevus (n=78)			Melazma (n=57)		
	n	r	rs	n	r	rs	n	r	rs
MSH . AKTH	32	0,48	0,56	68	0.51	0,47	55	0,37	0,39
MSH (cortizol)	37	-	-.1	68	-0,20	-0,17	55	-0,17	-.21
AKTH (cortizol)	34	0,21	0,36	68	-0,31	-0,30	54	-0,19	-0,20

While conducting a correlation analyses between hipofiz adrenal gland system, the following dependence has been defined. Negative correlation has been determined between cortisol and AKTH, MSH in patients with pigment nevus. (6,7,8)

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