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LEVEL CORTISOL AT PATIENTS UNDER THE INFLUENCE OF ULTRALOW TEMPERATURE IN THE CONDITIONS OF CRIOCHAMBER

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Introduction: The general air cryotherapy - the method of short-term assignment of warmth from all surface body of the patient by a laminar stream dry air, temperature from -110 to -120°C. Such influence is stressful for a human.

Aims: Estimation level changes cortisol at patients in the course of treatment in ultralow temperature in conditions crio chamber.

Methods: Researches have been spent with use crio chamber «Zimmer Medizin Systeme» (Germany). In research has taken part 145 peoples. Duration of sessions influence of ultralow temperature made in the first day of 0,5 mines, then, increasing by 0,5 mines daily and reached 3,0 minute durations by 6-7 day of a course. The course crio influence made 20 sessions. Level cortisol blood was defined once a week after each 5 sessions with the analyzer «Biotec EL 800».

Results: Level cortisol before carrying out cryotherapy at patients averaged $436 \pm 26,6$ nmol/l, after carrying out 5 sessions crio influence its values have been fixed at level - $420 \pm 21,05$ nmol/l, after 10th session level cortisol has on the average decreased to values - $401 \pm 21,05$ nmol/l, after 15 sessions to - $391 \pm 21,5$ nmol/l. After course end crio influence the average level cortisol has made $365 \pm 31,5$ nmol/l that was authentic more low, than indicator reference values ($p < 0,05$).

Conclusions: In the course crio influence there was a gradual decrease in level cortisol that speaks about decrease in stress at these persons, and also about human body adaptation to ultralow temperature influence at such a mode to 20th session.