

## Polyrecep Relaxation in Trauma Rehabilitation

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### Description

Present trauma is considered to be special severity and presented to be both physical and mental powerful acute stress for the organism. Emotional disorders are almost to be a part of patient status after long-term treatment due to trauma or wound. Timely detection and correction of comorbid mental disadaptation are found to be more effective in complex treatment of traumatic patients.

One of the priority direction in contemporary medicine is development and practical application the new, scientifically-based programs for integrated medical rehabilitation because of the high rates of disability among people with various types injuries [1,2]. It is necessary to stress the special role in organization of patients rehabilitation in hospitals, where correction of local body injures is combined with treatment of psychological trauma [3,4]. Long-term treatment of trauma or injury usually lead to disturbance in emotional sphere, to absence of adequate estimation of the events, to decrease of communicative qualities [5]. Therefore, various methods of psychocorrection and psychotherapy are to be very important for every patient with the consequences of trauma. The goal of present study was to substantiate and evaluation of effectiveness of polyreceptor relaxation (PRR) in complex rehabilitation of patients with mental disadaptation (MD) in convalescence period of traumatic disease (TD). PRR with use of the Alpha capsule (USA) was presented in one-stage influence on the organism of several programmable methods (thermotherapy, hardware vibromassage, inhalation aromatherapy, ozone therapy, ophthalmic-chromo and music therapy) [6].

Comparative studies on complex of clinical, psychological and neurophysiological parameters were carried out. 250 people with various injuries of the musculoskeletal system were examined in 1-2 months after the incident. The average age of the patients is 36.2 years. In all patients, during the initial examination, there were signs of PD of varying severity. Subjects were divided into 2 groups for 125 people both primary and control.

All patients were given traditional treatment in the recovery period of TD: roborant remedies, nootropic, neuroprotective and vasoregulating ones according to indications, therapeutic physical training, massage. Patients of the main group in addition to the basic treatment were treated by our developed method where Alfamassage-33 complex was used. The exposure time was 30 min daily for 8 to 15 procedures [7].

The reduction of the main clinical manifestations was found in patients of the control group during re-examined however, the pain syndromes were noted to be so pronounced that disturbed the quality of the night sleep and overall well-being. According to an analysis of the dynamics of complaints of the patients of the main group revealed

a significant decrease, more than 3 times the symptoms of the asthenic circle, a decrease in phantom and pain sensations ( $p < 0.05$ ).

These data correlated with the pronounced positive dynamics of psychophysiological indices in the patients of the main group in comparison with the data obtained in the control group. In the main group, after a complex therapy with PRP, the values of reactive anxiety in the Spielberger test decreased ( $p < 0.05$ ): in 58.1% of patients there was a decrease to a moderate level, in the control group- in 10.0% of subjects.

The results of the re-examination show that there are significant changes in the assessment system and personality relations of the patients in the main group.

The study of the dynamics of the main physiological indicators indicated an improvement in the functional state of the cardiovascular system and the autonomic regulation of the activity of internal organs in the patients of the main group.

Relative normalization of blood pressure and respiratory rate occurred in 27.8% of the patients in the main group, while no significant changes were detected in the control group. The recovery of the frequency-spatial structure of the  $\alpha$ -rhythm according to electroencephalography in 29.4% of the patients of the main group was noted, compared with 4.2% of the control group subjects.

The significant improvement in the quality of life indices (energy, sleep quality, emotional responses, physical activity) of the patients of the main group according to the Nottingham Health Profile (NHP) method confirmed the previous proposition about the dominant role of psychological disorders over somatic disfunctions in development of complex consequences after severe trauma. Thus, stable positive dynamics of most functional indicators and psychophysiological indices of the patients when complex of methods in treatment with PRR was used let to suggest the necessity of psychocorrection for rehabilitation after severe trauma.

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