Treatment of post-traumatic stress disorder (PTSD) with a complex of drugs from the series DETOX, ENDOCRINOTOX and FLOWERPLEX

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Target research - estimate efficiency joint application complex potentiated drugs of the company "GUNA" - Detox 17, Endocrinotox for patients 2 and 3, Flowerplex 5 in treatment with PTSD.

Materials and research methods

The object of observation is 215 FSB officers who repeatedly participated in service and combat operations. In the course of the work, 51 men with a diagnosis of PTSD at the age of 35.4 ± 7.2 years and 48 women with PTSD at the age of 38.1 ± 4.2 years were selected.

The control group consisted of 50 men and women with PTSD, comparable to the experimental groups in terms of age and symptoms of PTSD manifestation.

Organization of research

All patients diagnosed with PTSD were randomized into four groups. Individuals from experimental groups 1 (men) and 2 (women) received a complex of preparations Detox 17 + Endocrinotox 2 + Flowerplex 5 (men) and Detox 17 + Endocrinotox 3 + Flowerplex 5 (women). The sensitivity of patients to these drugs was determined by drug testing on a hardware-software complex for pulse-hemoindication ("ASGARD") developed by MTI of Russia.

In control groups 3 (men) and 4 (women), “placebo” - drinking water was used. The period of taking the drugs was 60 days.

Demographic indicators (age, place of birth and residence, education, etc.), anamnestic data (location of the traumatic event, frequency and duration of participation in operations, etc.) were collected from all subjects before and after the experiment. Physical (height, weight and other anthropometric data), instrumental (12-lead ECG, tonometry, pulsometry with the Omron apparatus) and psychophysiological (SMIL test, SAN technique, M. Luscher's color choices test, analysis of adaptation reactions) studies were carried out.

Diagnostic criteria for PTSD

Patients were selected from the number of patients in the acute and chronic stages of PTSD; the diagnosis was made according to the DSM-IV criteria.

According to the described approaches, 51 men (aged 35.4 ± 7.2 years) and 48 women (aged 38.1 ± 4.2 years) were selected, who received the drugs for two months.

Scheme of drug use

Patients from the experimental (1 and 2) groups during the day, in several doses, drank 0.5 liters of drinking water containing from 5 to 25 drops of each of the preparations: Detox 17, Endocrinotox 2 or 3 and Flowerplex 5. The dose of drugs for each patient was selected individually by the method of pulse hemoindication. Patients from the control (3 and 4) groups - "placebo" during the day, also drank 0.5 liters of drinking water that did not contain drugs. The moment of withdrawal from the study was considered the date of examination of the patients after the end of the drug intake.

The medical staff of the sanatorium monitored the intake of drugs.

Statistical analysis methods

To assess the reliability of the materials obtained, the Student's t-test was used for paired samples, and the distribution of patients by proportions in groups - using the z and 2. The revealed differences in the compared samples were considered significant in the case of $p < 0.05$.

results

The total number of patients with PTSD who received drugs for 2 months as a result amounted to 99 people. The placebo group included 100 patients who had a negative drug susceptibility test. None of the 99 people who took the complex of drugs daily for two months had any adverse reactions.

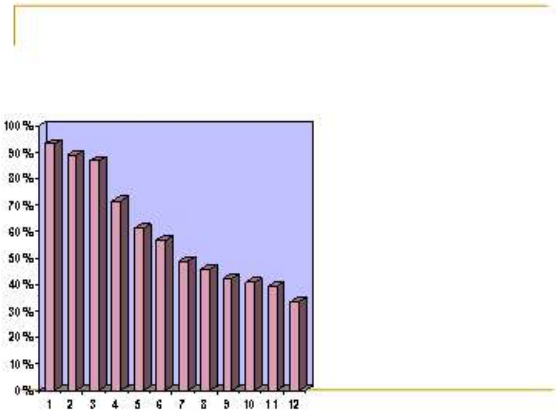
The results of the "entrance examination of patients" are given in table. one.

Table 1

Results of examination of patients at the time of inclusion in the study

Physical examination	Main groups	Control groups	Clinical norm
Heart rate contractions, in 1 min.	82.4 ± 3.6	83.7 ± 2.0	60–90
Systolic blood pressure, mm Hg	142 ± 6.6	141 ± 8.8	120-140
Diastolic blood pressure, mm Hg	89.3 ± 5.28	91.4 ± 3.8	60–90
Respiratory rate movements, in 1 min.	18.1 ± 2.6	18.2 ± 2.5	14-18

The symptoms observed in patients at the beginning of the study are shown in Fig. one.



Rice. one.Symptoms observed in patients (1 - increased exhaustion; 2 - decreased mental and physical performance; 3 - psychosomatic manifestations: fluctuations in blood pressure; headaches, cardio , myo- and gastralgia, etc .; 4 - increased irritability; 5 - a decrease in the level of natural drives; 6 - sleep disorders; 7 - reminiscences; 8 - meteorological stability; 9 - senestopathy; 10 - hyperhidrosis; 11 - increased alertness; 12 - violations of thermoregulation)

Analysis of adaptive reactions by the method of Garkavi L.Kh. at the time of the study showed that 31.2% of the first group had an adaptive reaction of "quiet activation" (indicating a persistent resistance of the organism to various unfavorable factors). In 15.6% of this group, the adaptation reaction of "training" was determined (the body's resistance in this case is comparatively insufficient to eliminate chronic foci of pathology). In the group of patients of the 2nd experimental group
29.4% had a “calm activation” response, 15.3% had a training response. In group 3, 28.9% had a “calm activation” response, 16.2% - a training response, and in group 4, 30.6% had a “quiet activation” response, 15.8% - a training response. In the majority of patients (53.2–54.9%) of the experimental and control groups at the time of examination, an adaptation reaction of “chronic stress” was observed (Table 2).

table 2

Adaptive reactions in the experimental and control groups before treatment

Adaptation reactions by L.Kh. Harkavi	Group 1 (experiment, men)	Group 2 (experience, women)	Group 3 (control, men)	Group 4 (control, women)
Workout	15.6%	15.3%	16.2%	15.8%
Quiet activation	31.2%	29.4%	28.9%	30.6%
Chronic stress	53.2%	55.3%	54.9%	53.6%

Analysis of the results obtained after the end of treatment in patients of the experimental and control groups
As a result of daily treatment, significant positive changes occurred in the main groups. As a result of the study, all patients completed the treatment with positive dynamics. No deterioration was noted in any of the groups. The moment of withdrawal from the study was considered to be the examination of patients after the course of treatment. The main parameters by group are presented in Table 3.

Systolic blood pressure decreased from 142 ± 6.6 to 126.4 ± 9.6 mm Hg, and diastolic blood pressure decreased from 83.7 ± 12.1 to 75.7 ± 6.2 mm Hg The heart rate decreased from 82.4 ± 3.6 to 68.3 ± 5.1 beats / min. All changes are statistically significant ($p < 0.05$). There were no statistically significant changes in the control groups.

Table 3

Some indicators in the experimental and control groups after treatment

Physical examination	Main groups	Control groups
Heart rate, in 1 min. Systolic blood pressure,	68.3 ± 5.1	77.4 ± 5.5
mm Hg Diastolic blood pressure, mm Hg Art.	126.4 ± 9.6	139.7 ± 6.4
	75.7 ± 6.2	87.4 ± 6.1
Respiratory rate	15.7 ± 1.9	17.7 ± 2.2

The most significant changes in the indices of adaptive reactions were observed in the 1st experimental group, where the number of patients with the reaction "chronic stress" significantly decreased almost three times (from 53.2% to 13.7%, p <0.05), due to a significant increase in the number of patients with the "training" response (from 15.6% to 42.2%, p <0.05) and the transition from the "chronic stress" reaction to the state of the "training" and "calm activation" reactions.

Table 4

Indicators of adaptive response in the experimental and control groups after completion of the study

Adaptation reactions by L.Kh. Harkavi	Group 1 (experiment, men)	Group 2 (experience, women)	Group 3 (control, men)	Group 4 (control, women)
Workout	42.2%	36.9%	18.1%	18.6%
Calm activation	44.1%	44.2%	31.8%	32.7%
Chronic stress	13.7%	18.9%	50.1%	48.7%

In the group of women, the number of patients with the reaction "chronic stress" significantly decreased (from 55.3% to 18.9%, p <0.05), due to an increase in the percentage of the reaction "training" and "calm activation" and the transition from the reaction "chronic stress" to the state of reactions "training" and "calm activation". In the control groups, there were no significant changes in the parameters of adaptive reactions.

The results of M. Luscher's color test (Table 5) indicate that deviation from the autogenous norm was revealed in all experimental and control groups of patients. After treatment in the experimental groups (1, 2), the ratio of personal properties was more stable and balanced (some personal characteristics did not contradict others), in the control groups (3, 4), such changes did not occur.

Table 5

Results of M. Luscher color test in experimental and control groups before and after treatment

Group no.	Luscher test results before treatment (conventional units)	Luscher test results after treatment (conv. units)
1 (experiment, men)	8.14 ± 0.4	3.04 ± 0.7 *
2 (experiment, women)	7.99 ± 0.7	3.09 ± 0.6 *
3 (control, men)	8.16 ± 0.2	5.47 ± 0.3
4 (control, women)	7.96 ± 0.7	5.61 ± 0.6

* - p <0.05

The most effective treatment was 74% in group 1 (men), in group 2 (women), treatment was 67% effective. In the control groups, there was no statistically significant change in symptomatology as a result of treatment.

The maximum positive changes, in the main number of patients receiving the drugs, were recorded on days 4–5 of treatment. Further, this level of effectiveness, in the majority of patients, remained unchanged during the entire period of taking the drugs, and in 12 individuals there was even a slight decrease in the level of the maximum effect of therapy. The therapy provides a high level of effectiveness (a kind of "plateau"), above which the result does not change.

Conclusions and discussion

According to the literature, psychopharmacological drugs are considered the most effective method for correcting PTSD. The effectiveness of treatment in this case reaches from 78% to 92%, however, 56–87% of patients have side effects of varying severity, and 59.2%

patients receiving these drugs, there is a decrease in indicators of the immune status (Smekalkina L.V., 2005; Voronkov A.A., 2007; Mikhailova A.A., 2003, 2006).

The study showed that the drugs used were similar in effectiveness (up to 74%) with psychopharmacological drugs in the treatment of the consequences of PTSD (the effect lasts up to 6 months). At the same time, the obvious advantage of the applied therapy with new biopotentiated complexes is the safety of therapy.

A large selection of proposed drugs, with their clinical safety, allows us to search for even more effective drug regimens and combinations. It is also necessary to trace the more distant results of treatment and the advisability of repeated courses of therapy with these drugs in order to increase clinical efficiency.

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