



Dolna 17, Warsaw, Poland 00-773 Tel: +48 226 0 227 03 Email: editorial\_office@rsglobal.pl

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# INFLUENCE ANTIOMOTOXIC PREPARATIONS ON UNSPECIFIC REACTION OF ADAPTATION OF ORGANISM

*Feroyan Eduard, PhD. (Biol.), Associate Professor, Georgian State Teaching University of Physical Education and Sport, Tbilisi, Georgia, ORCID ID: https://orcid.org/0000-0003-4177-7206* 

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## ABSTRACT

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## **KEYWORDS**

antihomotoxic preparation, unspecific adaptation reactions, control, correction. Effectiveness of Heel firm antihomotoxic preparation on unspecific adaptation reactions of organism was studied in this work. The main work was being done on the base of Georgian LLS of Physical Culture and on the base of Center of Treatment, Tbilisi. 57 patients 19-58 of age were taken for the investigation. They were divided into two groups. Group A (30 person) was prescribed antiohomotoxic preparations dosage according to general rules of usage of Heel firm preparation. Control and correction of the dosage of Heel firm preparation was making of croup B (27 persons) once a week. By its phone parameters of white blood group A and B didn't have truthfully differences (p>0,05). The possibility to model the resistance of organism with putting an antihomotoxic preparation was established with using of parameters of white blood. The new approach to individual dosage of antihomotoxic preparation was worked out in treatment of such diseases as gastritis, colitis, cystitis, adnexitis, thrombophlebitis, bronchial asthma, arthritis.

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**Introduction**. Selie's theory of stress has wide dissemination in different spheres of medicine and biology [10,7,11,1,2,3,6]. Development of stress-reaction on different irritants by quantity – is lying in basis of many pathological processes.

That is why the study of this problem permits to penetrate into the mechanisms of diseases more deeply and substantiated theoretically some methods of treatment [7].

Meanwhile the quality criterions of estimation of intensity degree and phase of stress reaction are not reliable.

L. Garkavi and co-authors [7] were making an attempt to estimate such description of adapt reactions depending on intensity and duration of irritant acting. They called the adapt reaction on weak irritant reaction-training reaction mild intensity reaction-activation reaction and on strong or extraordinary irritant-stress reaction.

We were to study effectiveness of antiohomotoxic preparations influences on unspecific adapt reaction of organism using criterions worked out by L. Garkavi and co-authors [7].

The aim of investigation was to establish the possibility of modulating the resistance of organism by putting in antiohomotoxic preparations and to determinate an individual dosage of antiohomotoxic preparations.

**Material and methods.** The main work was being done on the base of Georgian LLS of Physical Culture and on the base of Center of Treatment, Tbilisi. 57 patients 19-58 of age were taken for the investigation (tab.1). They were divided into two groups. Group A (30 person) was prescribed antiohomotoxic preparations dosage according to general rules of usage of Heel firm preparation. Control and correction of the dosage of Heel firm preparation was making of croup B (27 persons) once a week [9]. By it's phone parameters of white blood group A and B didn't have truthfully differences (p>0,05).

Blood was taking in the morning on an empty stomach on the day when treatment began (or on the day before) – initiate background, and then once week [2]. The count of the leucocyte's formula was being made by the known method. Other formal elements of white blood and common amount of leucocytes were only additional features indicating valuable reaction degree, its intensity and its relation to generally accepted limits.

Diagnosis	Amount of patient		Group A	Group B	Age
	men	women			(years)
Gastritis	10	1	6	5	19-45
Colitis	5	-	3	2	24-50
Adnexitis	-	3	2	1	29-42
bronchial asthma	6	2	4	4	28-35
Cystitis	2	3	3	2	31-58
Arthrosis	16	2	10	8	50-58
Thrombophlebitis	2	5	2	5	42-56
All	41	16	30	27	

Table 1. Disseminated patients

Reaction index (R) was used to characterize adapt zones of reaction. It's equal to correlation between the number of lymphocytes and filamented neutrophils and have the most quantity in zone of reaction at a heightened activation-from 0,70 to 0,96 and then in descendent order-zone of reaction of calm activation – from 0,51 to 0,69, training reaction zone – from 0,31 to 0,50 and stress reaction zone from 0,30 and lower [7].

**Results and their discussion.** Analysis of not specific adapt reaction showed that they are proceeding by stages and are characterized by certain complex of changes in composition of white blood, the level of organism unspecific of resistance, inflammatory processes and metabolism depends on these changes.

We have exposed the main, background zones of adapt reaction in patients by analyses of white blood (dr.1).

Stress reaction zone. As we know from Selie's works, the stress is characterized by leucocytosis, eosinopenia, neutrophilosis [7,5,11]. The conducted investigation allowed to fix medium quality parameters of stress in patients (40 person) number of lymphocytes 17,3 $\pm$ 3,92%, filamented neutrophlus 80,5 $\pm$ 5,68%, stab neutrophilus 8,2 $\pm$ 1,11%, eosinophilus 0,3 $\pm$ 0,53%, monocytus 8,8 $\pm$ 1,61%, leucocytes (12,0 $\pm$ 1,89)\*10<sup>9</sup>, reaction index is equal to (R) 0,22 $\pm$ 0,55.

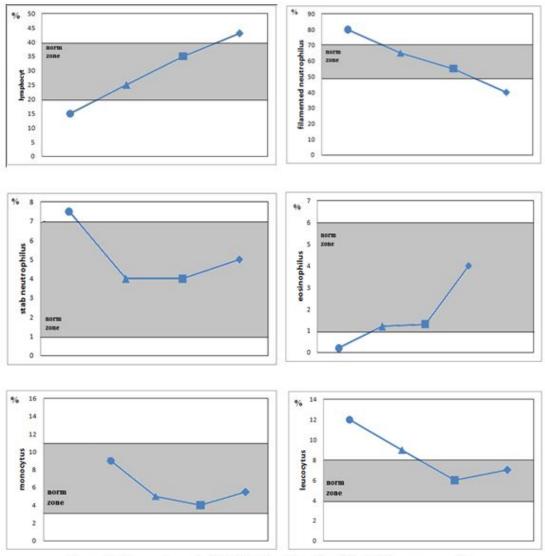
*Training reaction zone* (9 person). The number of lymphocytes within the lowest norm zone 23,8 $\pm$ 2,99%, filamented neutrophilus 65,3 $\pm$ 2,62%, stab neutrophilus 4,6 $\pm$ 0,37%, eosinophilus 1,3 $\pm$ 0,5%, monocytus 4,8 $\pm$ 0,83%, leucocytes (9,6 $\pm$ 0,73)<sup>\*</sup>10<sup>9</sup>, reaction index is equal to (R) 0,36 $\pm$ 0,05.

Activation reaction zone, divided into calm activation reaction zone (5 person) the lymphocytes number – within the half of norm zone  $32,4\pm1,34\%$  filamented neutrophlus within the lowest half norm zone  $55,0\pm1,22\%$ , stab neutrophilus  $4,6\pm0,55\%$ , eosinophilus  $1,6\pm0,55\%$ , monocytus  $4,6\pm0,55\%$ , leucocytes  $(6,4\pm0,89)^*10^9$ , reaction index is equal to (R)  $0,59\pm0,03$  and heightened activation reaction zone (3 person) number of lymphocytes  $40,3\pm0,58\%$ , filamented neutrophlus  $4,6\pm0,55\%$ , stab neutrophilus  $5,0\pm0,82\%$ , eosinophilus  $4,3\pm0,58\%$  and monocytus  $5,7\pm1,16\%$ , leucocytes  $(7,7\pm0,58)^*10^9$  reaction index (R) is equal to  $0,88\pm0,04$ .

Deviation from the marked parameters of white blood for training reaction zone and activation reaction zone – leucocytosis (more than  $8,0^*10^9$ ), leucopenia (less than  $4,0^*10^9$ ) monocytosis (more than 7%), monopenia (less than 4%), basophilia (more than 1%), eosinophenia (less than 1%) or eosinophilia (more than 6%) – points to tenacity of this reaction, to breaking up of conformation in functioning under the systems of organism.

The analysis of the received results showed that to achieve therapeutic effect it's necessary, to act, and to support strongly either training reaction zone (slow heightening resistance of organism to different diseases), or activation reaction zone (quick heightening of resistance of organism).

The strongest reaction of "health" is a heightened activation zone, which causes high unspecific resistance of organism.



Draw 1. Parameters of white blood until putting "Heel" firm preparation.



The comparison of the results of groups A and B (dr.2) in the end of cure by antiohomotoxic preparations of Heels firm has showed the next: the number of patients of group A was in stress reaction zone feel from 21 to 10 patients. The number of patients in training reaction zone increased from 5 to 10 patients and in calm activation zone-from 2 to 8 patients, and in heightened activation reaction zone the number of patients stayed the same (2 patients).

The number of patients which in stress reaction zone wash observed in group B after finishing of treatment (dr.2). The number of patients in training reaction zone increased from 4 to 10 persons and in calm activation reaction zone from 3 to 13 persons and in heightened activation zone from 1 to 4 persons.

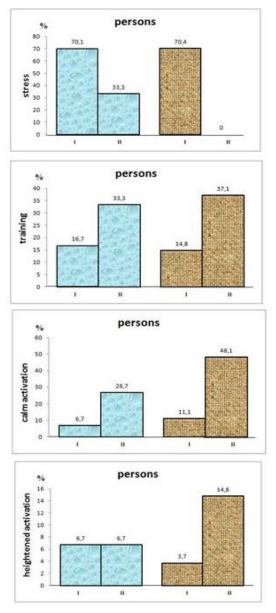
This single-minded usage of individual doses antiohomotoxic preparations in group B gives a quick and more effective cure in above mentioned diseases.

The result of blood analysis of patients in group A and B which were in the end of cure in training and activation zone: the complete disappearing of complains and health improving was observed.

Patient of group A (10 person) after cure by antihomotoxic preparations have not showed health improving and leucocytes formula also pointed to absence of normalization. There were found out diseases with structure changes (cirrhosis hepatic, heavy chronic gastritis, ulcer in exacerbation phase, new growths of different organs and tissues).

Antiohomotoxic treatment with the help of transferring patients to training reaction zone was done in acute gastritis, colitis adnexitis, bronchitis, cystitis.

Calm and at the same time quick anticoagulation action has been received with the help of transferring patients to the training reaction zone. This is especially effective when it is necessary simultaneously receive antiinflammation effect (for exp. acute thrombophlebitis).



Draw 2. Quantity correlation (in %) in group (A ) and (B ). Which are on different stages of activated till (I) and after (II) using antiohomotoxic preparation of Heel firm.

The curing with the help of transferring patients to the activation reaction zone was conducted in chronic inactive processes (chronic gastritis, colitis, bronchial asthma, arthritis). Activation reaction zone was also used for complete, finishing of the cure of acute inflammatory processes, for protecting from actions of different damaging factors by absence of expressing leucopenia. Transferring patients to calm activation reaction zone also was used for normalization blood coagulation and transferring to the heightened activation reaction zone was used by in chronic thrombophlebitis.

Thus, to active curing effect it's necessary to get strong support either by training reaction zone or by activation reaction zone. Deviation from the certain zone (to the stress) is a signal for decreasing (or increasing) the dose of antiohomotoxic preparations for transferring unfavorable reactions in the limits of its normative parameters. For this aim we worked out a special coefficient of adaptation reaction. Reaction coefficient (F) – the number on which we must multiply (or divide) the dose antiohomotoxic preparations, to transfer: into the next adaptation reaction zone. It is individual for each patient. For young patient's "F" varies in average from 1,5 to 2,5, for patients weakened and old "F" is equal from 1,2 to 1,5.

How to choose preparation doze?

If blood indices are becoming typical for training zone after the first taking antiohomotoxic preparations, than in case it is necessary to support reaction is certain zone the dose is not changed (till the next blood analysis). If it's necessary to cause activation reaction zone the doze is increased after multiplication of the offered coefficient. If the activation zone appears after that, so "F" is selected correctly. There can be two variants, if "F" turns out to be true to the fact:

a) the training reaction zone remains, then it's necessary to increase the first doze taking more "F";

b) instead of activation reaction zone the stress reaction zone will develop – "F" must be decreased.

If blood indecisive becoming typical of activation reaction zone after the first taking the preparation, then in cases it's necessary to support activation reaction zone the doze must be left the same. If the training reaction zone must be exposed, it's necessary to decrease the doze, dividing by offered "F". If blood indices remain typical for stress reaction zone after the first taking of preparation, the dose must be decreased fill the next blood analysis dividing by the "F" – size. If the patient's organism remains the same in stress-reaction zone after that then the selected "F" is too small. And if training reaction zone is too large then activation reaction zone-the "F" size is selected right.

In calculation "F" it must be taken into account that the main thing is not to get info stress reaction zone.

**Conclusions**. Thus, complicated changes characterizing each of the adaptation reaction zones, have their reflection in the morphologically composition of the white blood. The usage of parameters of white blood gives chance to make individual antihomotoxic preparations dosage.

The developing adapt reactions are connected with currency and prognosis of the pathologically condition of organism single minded usage of the doze of antihomotoxic preparations by Heel firm gives foundation to quick and effective achievements of "health".

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