

The place and possibilities of bioresonance therapy in the endoecological system rehabilitation

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Why has it become difficult to cure seemingly "common" diseases?

The process of evolution, human life during the period of technocratic heyday by the end of the 20th century, radically changed the environment: the chemical, physical, mental "climate" of life and the way of life.

The biosphere around us and the human body have lost their former habitual, seemingly delimiting, protective barriers. Anthropogenically caused pollution of the body has gone beyond the zones of ecological disaster and became the direct cause of health degradation and extinction. Especially affected are the zones of ecological disaster, the territory of which in the Russian Federation occupies over 50% and where more than 70% of the population lives.

The crisis in the external environment has developed into a crisis in the internal environment. Countless new toxic substances with various chemical and physical properties, mainly of anthropogenic origin, penetrate the body and violate its ecology. The content of dozens of them in the environment is many times higher than the maximum permissible concentration (MPC). But it is not only the MPC that is important. Entering the body with polluted air, poor quality food, water saturated with chemicals, toxic substances potentiate each other's action. Due to the ability to accumulate toxins, the body can become intensely polluted even after a short stay of a person in a poisoned atmosphere. A pathological chain of cause-and-effect relationships is triggered, which ultimately leads to aggravation of exotoxicosis by endotoxicosis (Fig. 1).



Rice. one. Stages of pollution of human ecological space and cells

What else violates the ecology of the body?

The foregoing is only one of the reasons that violate the ecology of the organism. Not to mention diseases, such reasons are unfavorable factors not only of ecology, but also of paraecology: urbanization, bad habits, social cataclysms, increased radiation, deficiency of natural solar background, systematic stress, material distress, nutritional defects.

Simplified, the sequence of the considered phenomena can be represented as follows: coming from the external environment, disrupting metabolism substances + toxins, formed in the body itself due to other reasons (stress, bad habits, unhealthy diet, etc.).

Where do exo- and endotoxins accumulate?

Toxic substances entering the body quickly leave the blood and accumulate in the "holy of holies" of cell life - their immediate interstitial space. Every cell of the human body is forced to live and function in its own polluted atmosphere (Fig. 2).

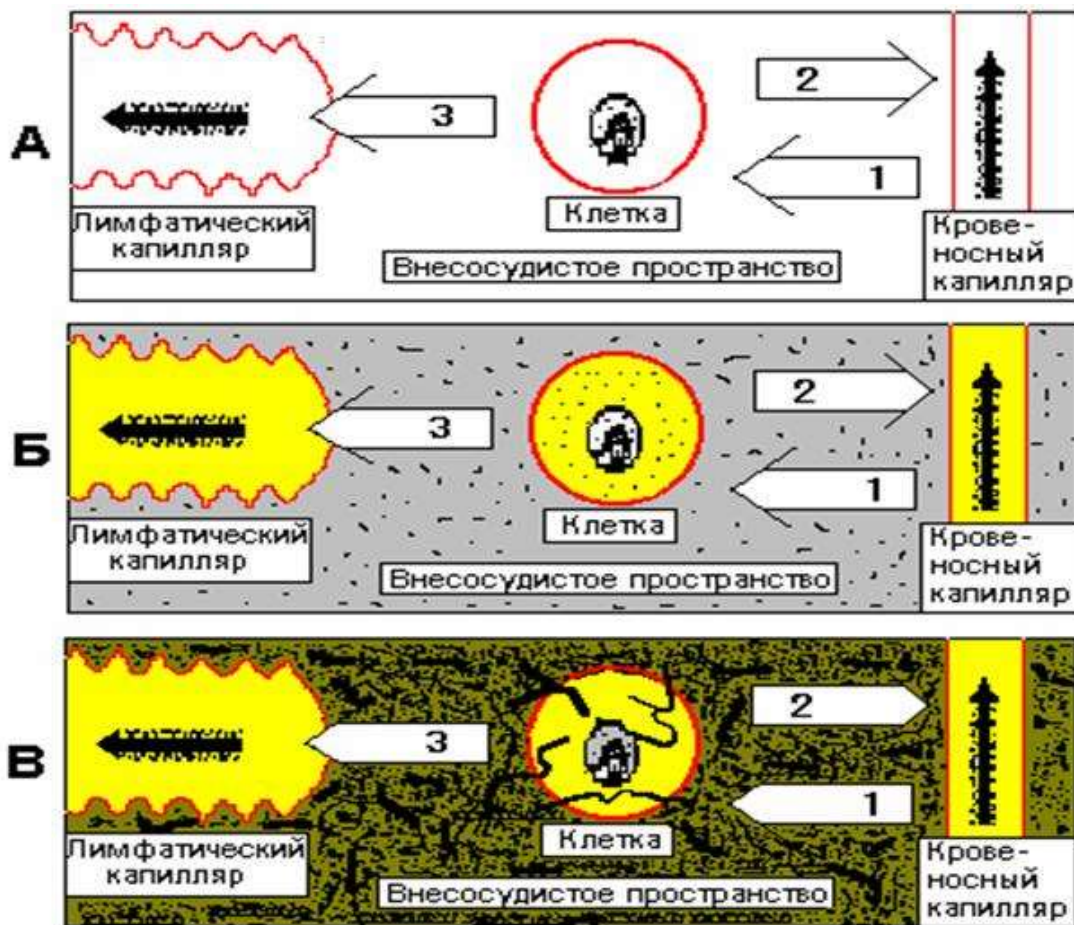


Fig. 2. Stages of pollution of the ecological space of cells (A - norm; B - reversible accumulation of exo- and endotoxins; C - irreversible accumulation of exo- and endotoxins. 1, 2, 3 - direction of flow of tissue fluid)

Once in the body, toxic substances accumulate in the interstitial space. Every cell of the human body is forced to live and function in its own polluted atmosphere.

Back in the last century, K. Bernard wrote: "All life processes have only one goal - maintaining the constancy of living conditions in the internal environment."

In case of intoxication characteristic of an ecological crisis, the systems that carry out endoecological control are primarily affected. Contamination of the body with chemical substances aggravates the disturbances caused by other harmful effects, and, conversely, any factor unfavorable for the body can create conditions for the clinical manifestation of the pathological effect of environmental poisons. Even if a person from an ecologically unfavorable region moves to an ideally healthy area, his rehabilitation can take many years. The organism does not possess specific mechanisms for their neutralization or removal from this space: for the emergence of such mechanisms, thousands of years of evolution are required. In addition, physical and mental overload, unhealthy diet and other negative factors deplete those protective neutralizing devices that a person has. Like the biosphere, which cannot cope with ensuring the stability of the external environment, the body also cannot cope with maintaining

stability of the internal environment. At the same time, the ecological, or rather, endoecological, conflict is mainly localized in the "cell - external (pericellular) environment" system. At the same time, he in a peculiar way imitates a conflict in the system "man - external environment"

The pathology of ecological genesis in its development goes through 3 key stages:

1. Poison damage to the fine structures of the body and disruption of their function without clinical manifestations of the disease.

2. Depletion of compensatory mechanisms and the appearance of initial signs diseases;

3. Clinical manifestations of the disease.

Violation of the endoecological balance provokes the emergence of new diseases, makes it heavier and changes the nature of the course of many existing diseases.

The main conflict unfolds at the "pericellular environment-cell" level:

- increased metabolic disorders and the formation of new toxins;
- weakening and damage of homeostasis support systems;
- hidden, and then obvious manifestations of intoxication;
- weakening of the physical, mental and other functions of the body;
- endoecological diseases.

Can traditional methods of healing, hardening and detoxification solve the problem?

Naturally, the healing and hardening of the body can be of significant help in preserving the vitality of a person. But they do not solve the fundamental problem of detoxifying an ecologically poisoned organism.

Therapeutic toxicology has made great strides. However, the detoxification of the space surrounding the cell from a poisonous "cocktail" containing dozens of chemicals, including of unknown nature, turned out to be a difficult task for her methods. Detoxification will not be complete without "direct" cleansing of the extravascular space. Moreover, it must be produced in large quantities, and it must be atraumatic and economically feasible.

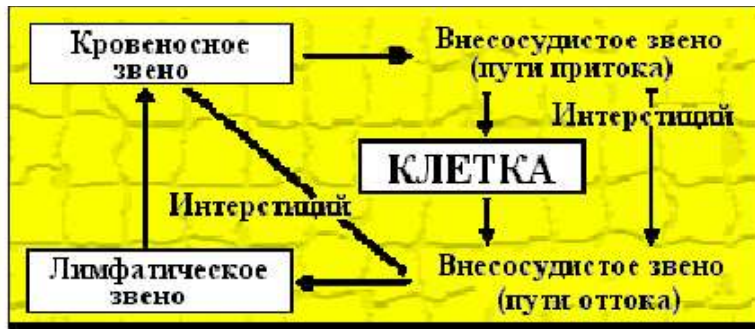
What does biological and medical sciences offer?

Biology and medicine turned out to be unprepared for this situation. Faced with pollution of the internal environment of the body and "environmentally dependent" pathology, and such is the overwhelming majority of diseases, the doctor has neither the necessary knowledge, nor the appropriate medicinal and technical equipment. He treats the sick, as he was taught - by methods developed without taking into account the changed interaction of the systems "man - his habitat" and "cell - his habitat." This also applies to preventive medicine. Improvement is carried out according to the principle of strengthening the body's defenses without using adequate methods of cleansing the internal environment.

Based on the foregoing, the problem of the ecology of the organism was formulated (1969–1995) and developed from the standpoint of the ecology of the cell. By analogy with the term "ecology", this direction was designated by the term "endoecology".

The key goal of endoecology was the creation of a detoxification system or a system of endoecological rehabilitation according to Levin (ERL), which opened up the possibility of healing the body at the cellular level and combating this phenomenon.

For this, methods have been developed to control the extravascular humoral transport and the drainage function of the lymphatic system (Fig. 3).



Rice. 3. Scheme of the humoral transport system of the body

The lymphatic system (LS) is one of the links of humoral transport: 1) blood link , 2) extravascular link (inflow pathways), 3) cell, 4) vascular link (drainage pathways), 5) lymphatic link, 6) blood link.

The role of IHT and LD in exogenous and endogenous contamination of the body:

- IHT and LD suffer in all pathological processes, regardless of their etiology and pathogenesis;
- violations IHT and LD affect the development and outcome of diseases;
- elimination of these violations increases the effect of therapeutic and preventive measures.

Control and stimulation IHT and LD allows:

- carry out detoxification at the cellular level;
- improve metabolism at the cellular level;
- enhance the function of excretory organs and excretion of toxic metabolites from the body;
- to strengthen the functions of the lymph nodes;
- block lymphogenous metastasis of microorganisms, pathogenic cells, toxins;
- to increase the accumulation of drugs in the pathological focus;
- eliminate drug intolerance;
- to reduce the toxic effect of drugs;
- accelerate the mobilization of immunity;
- to correct the clotting of lymph, tissue fluid, blood.

Endoecology today is not a theory, but a medical and health-improving practice that effectively supplements the arsenal of modern medicine. Methods aimed at the ecological space of the cell are fundamentally new.

For the implementation of ERL, a fairly large set of tools and methods has been developed, where the key role was played by hardware physiotherapy, the methods of which, as it turned out, allow effective detoxification at the cellular level in case of environmental and paraecological pollution of the body.



Rice. 4. The place of endoecological rehabilitation in curative, wellness and preventive medicine

Stimulation of IHT and LD is a key part of the methodology for endoecological rehabilitation of ERL (Table 1).

Table 1

Means and methods affecting lymphatic drainage

The nature of the impact	Impact options
Physical exercise	Any
Massage	Manual, hardware, underwater
Thermal treatments	Sauna, bath, baths, heating pads, mud, mustard
Reflexology	plasters Effects on the points of lymphatic stimulation
Leeches	Means of regional stimulation of LD
Electrophysiotherapy	Galvanization and drug electrophoresis, impulse currents: amplipulse therapy, interference therapy, diadynamic therapy, magnetotherapy, ultrasound therapy, UHF-UHF-therapy, laser therapy, Biopton light therapy, EHF-therapy, bioresonance therapy
Medicinal substances	Including phyto-, homeopathic and other preparations
Transfusion procedures	Blood, aqueous solutions, blood substitutes General and
Hyperbaric oxygenation	local

In this regard, a special place among the latest biophysical methods is methods of exposure directed along the path of indirect influence on the key links of the disease through neurohumoral, immune and endocrine mechanisms. Postulating the statement that the disease is basically a violation of the homeostasis of substances, energy and information and the recognition of the information-energy aspect of the action of many physical factors was the reason for the use of new energy-information technologies to normalize homeostasis. From these positions and according to the literature, the most promising are the methods of endogenous and exogenous bioresonance therapy (BRT), based on the use of electromagnetic oscillations of low and ultra-low intensity of a strictly defined form and frequency with which the structures of the body enter into resonance, thereby suppressing pathological, restoring and enhancing the physiological frequency spectra of oscillations and their synchronization (Yu.V. Gotovsky et al., 1990-2005). At the same time, considering low- and ultra-low-intensity bioresonance effects, it is believed that the energy introduced into biological structures by external EMF (by any external influence) at the information level serves as a "trigger" for the redistribution of free energy of cells and tissues, which changes them

metabolism and functional state. The bioinformatic mechanism of action is explained, to some extent, by an adequate response of the nervous system to low energy stimuli, as evidenced by changes in the body at various levels:

on cellular - an increase in the negative charge of the cell's energy field, positive change in the activity of the cell membrane, restoration the electrical potential of the cell membrane, normalization of its permeability and transport functions, increasing the membrane resistance to lipid peroxidation;

on tissue - stimulation of metabolic and regeneration processes, restoration microvasculature and tissue trophism, normalization of vascular wall permeability;

at the level of holistic organism causing the following therapeutic effects: anti-inflammatory, decongestant, analgesic, immunomodulatory, regenerative, trophic, anti-sclerotic, psychocorrective, as well as the lymphatic drainage effect established by our research on the model of complex treatment and rehabilitation of patients with hemorrhagic fever with renal syndrome.

Thus, in patients with HFRS, against the background of the course exposure to BRT, an increase in the levels of free fractions, oligo-, and protein-bound sialic acids (CCK, OSSK, BSSK) in urine had a statistically significant decrease in the levels of all fractions as compared with the norm. Corresponding to these changes, the dynamics of the content of medium molecular weight peptides (SMP) in the blood plasma, which are a specific marker of endotoxicosis, changed unidirectionally and was manifested by a significant decrease in their concentration earlier than usually in patients with HFRS. In parallel, the fact of a significant increase in ECA and the amplitude of erythrocyte fluctuations under the influence of the course exposure to BRT was discovered, which indicated an increase in the membrane potential and thereby contributed to the restoration and accumulation of energy, an increase in the sensitivity of cell receptors and transport substances through the cell membrane. Comparison of the studied indicators of sialic acid metabolism,

In conclusion, it should be especially emphasized the possibilities of bioresonance therapy in neutralizing various types of anthropogenic environmental burden on the human body and the lack of similar effective methods for these purposes.

Conclusion

Bioresonance therapy, having a beneficial effect on the pathogenetic mechanisms of HFRS, promotes the processes of humoral transport and lymphatic drainage by normalizing blood and lymph outflow, restoring the processes of cell membrane regeneration, reducing the processes of degradation of connective tissue and is an integral part of endoecological rehabilitation programs in the complex treatment of many ecologic diseases.