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INTRODUCTION

Traditional medicine (TM), which arose on the basis of the ancient teachings of the East, now combines different disciplines, including reflexology (RT), homeopathy (GO) and bioresonance therapy (BRT) - the first group - require a special approach to explain the mechanisms of their action, compared with the second group, which includes manual therapy, herbal medicine, medical massage and other treatments.

This list could, if desired, be significantly expanded if we include a third group in it - methods of traditional traditional medicine, such as sacral, balneological, nutritional and a number of special methods such as urine therapy, hirudotherapy, which have been tested for centuries in practice and have their own long traditions.

But at the present stage of TM development, the combination of such different methods of diagnosis and therapy would greatly complicate the study of the mechanisms of action of these groups, because despite the fact that they all have one goal - the recovery of a sick person, they are characterized by significant differences in the mechanisms of their action.

If the methods of the first group have an energy-information-field basis [1], then the methods of the second group have a functional and physiological orientation, based on homeostatics and synergetics [2, 3], which are the basis for a balanced regulation of physiological processes and functional reactions of a person.

The conditional third group we have highlighted has a pronounced specificity and should be considered from completely different positions than the first and second groups, since it mainly touches on worldview, philosophical issues and requires completely different approaches for explanation based on transpersonal experience [4, 5].

The peculiarity of the first two groups is that they have not only great differences, but also significant similarities, expressed in the fact that they are fundamentally closely related to the fundamental foundations of modern physics, since "... information-field processes are important and an integral part of all types of traditional medicine "[1, p. nine].

In view of the above, examples can be given and, for example, noted, for example, the connection between homeopathy and complex issues of the structural properties of water molecules [7, 8], and RT and BRT - with the energy-informational properties of a living organism [9-11].

It may seem strange at first glance, but TM, like no other known modern medical field, is closely related to quantum physics for the simple reason that both water and the human body are

micro- and macroquantum systems [12, 16, 17].

Analysis of the available data indicates that there are sufficient grounds for such a statement:

- 1) the sensitivity of water and living systems to individual quanta of magnetic flow (2.07×10^{-15} Weber);
- 2) the interaction of living systems with external EM fields, including superconductivity phenomenon with a conversion factor of 500 MHz / µV;
 - 3) the sensitivity of living systems to the magnetic vector potential;
- 4) the presence of water memory for resonant frequencies, which is a phase-coherent phenomenon;
- 5) the ability to distant transmission and reception of information, etc. [7, 8, 12, 16, 17].

Therefore, for fruitful work in the field of TM and the development of modern views on the mechanisms of action in the methods of the first and second groups, close contact and scientific cooperation with physicists, physicians, and chemists in the field of condensed matter research is required to conduct joint physical, biophysical and medical research.

BIOPHYSICAL MECHANISMS OF RT AND BRT

It should be borne in mind that the human body is the finest EM field formation, and therefore it is sensitive to the environment, in which heliogeophysical factors and, in particular, geomagnetic variations and gravitational forces play an important role [13].

In this regard, in all functional and physiological processes occurring in the human body, the permeability of cell membranes for organic and inorganic substances is of great importance. The structure of the plasmalemma of the cell itself and the membranes of individual cell organelles have been studied in detail, and at their core they have double layers of lipid and protein molecules.

But their common characteristic structural basis is electrical double layers (DES), since each cell is a complex colloidal system with many DES [14, 15].

DES are located on both sides of biomembranes and form a single complex with it, which participates in all regulatory and metabolic processes in living cells.

It should be emphasized that DES plays one of the main roles in the reception of weak physical signals coming from both the external and internal environment of the body, occurring at the cell level and at the molecular level. In this case, physicochemical changes in DES lead to the formation of transmembrane potentials, exerting their influence on the transport of substances through membranes and, as a consequence, on the intensity of metabolic processes.

Studies have shown that DES respond by changing electrical processes to the action of various physical factors - EM and magnetic fields in a wide frequency range, ultrasound, laser action and, interestingly, to the highly penetrating nonthermal component of human radiation. possibly used in manual therapy and massage by specialists of the second group of TM, mentioned above.

Based on comprehensive studies, it was concluded that DES (and this should be especially emphasized) take part in the primary acts of information-field processes in the body and its interaction with external environmental factors [14, 15]. It should be noted that the sensitivity of DES to the effects of physical factors is very high and lies significantly below the threshold of sensitivity of the biological objects themselves, which is, on average, 10-12 W / m [15].

Thus, in all the processes of diagnostics and therapy of TM, as well as in the study of the processes of regulation and control in a living organism based on homeostatics and synergetics, one should take into account the important role of DES, which opens the way to a new understanding of the mechanisms of action in RT, GO, and BRT on the cellular and subcellular levels.

New approaches to the physical properties and structure of acupuncture meridians (ATM) and points (BAP), developed in recent years by various researchers [9-12, 16, 20], are also directly related to these three important methods of diagnosis and therapy of TM. The fundamental issues in these works are the understanding of the deep mechanisms of the effect of metal needles in RT, EM resonance phenomena in BRT and ART, and molecular field retransmissions in GO. But their study faces serious difficulties, despite the efforts made to elucidate them by anatomists, histologists, neurophysiologists, biochemists, specialists in electronics and molecular physics [12, 16].

First of all, this is due to the fact that, despite all efforts and many years of research, anatomical structures corresponding to ATM and BAP have not yet been found, although the method of diagnosis and therapy itself has been excellently working for centuries in the hands of numerous eastern and western medical specialists and is confirmed by ongoing physical studies. ...

A thorough study of the properties of ATMs showed that they are dynamic structures that are sensitive to changes in the homeostasis of a person who is in a normal state or with a disease, and skin resistance in BAP does not reflect all deep processes occurring in them [16].

It is interesting to note that in the case of functional, physiological or psychosomatic diseases, the BAP network changes synchronously at all levels at the most important points of the ATM, including micro-BAPs located on the auricle, on the nose, on the palm, on the legs, etc.

It was also found that the speed of passage of sensitivity in ATM and changes in skin resistance in BAP is significantly lower (40 cm / sec) than the speed of signal transmission along the nerve fiber (20-120 cm / sec). This fact indicates that the ATM and BAP network is a completely independent operating system with a high EM field strength and the resulting standing EM waves have their own group velocity, which is different from the signal transmission along the nerve fiber.

Studies have revealed high conductivity of ATM channels for both EM and acoustic waves and laser coherent radiation [15, 18], creating on

complex interference-holographic patterns in the body, which are standing EM waves coming from organs, tissues and cells of the body. This kind of research allows us to conclude that ATMs, possibly, represent a kind of waveguides for the passage of the "front of standing waves", and BAPs are invisible dissipative (nonequilibrium) electromagnetic field structures that depend on the energy state of the organism.

In conclusion, the progressive mathematical research in RT should be especially noted, which revealed an interesting fact that the resulting measurement data in the ATM and BAP systems of a living organism (for example, skin resistance or current conductivity) have a so-called "log-normal distribution" while nonliving systems have a "normal" distribution [16].

Perhaps this is due to the superposition of standing EM waves and frequency beats coming from many oscillators present in the body - its organs, tissues and cells. The frequency spectrum in this case will vary from ordinary noise to 1 / f, the so-called "flicker" noise, which is characterized by fluctuations at low frequencies. This indicates that energy goes from an area with a high frequency (presumably ATM with MHz frequencies) to places with lower frequencies, which correspond to BAPs as dissipative, non-equilibrium biophysical structures [16].

HOMEOPATHY

Considering the problems facing homeopathy, it must be admitted that here scientists enter the same complex area of research as modern quantum physics, which studies the problems of the physical vacuum as the main environment of the surrounding real world. Water, the main component of medicines in GO, is a unique formation, and only now scientists are beginning to deeply study it after many decades of hard work and research into its mysterious properties [7, 8, 12, 17, 19, 20].

Today, GO is the direct heir to all the extraordinary properties of water molecules - after a long period of public misunderstanding and skepticism, it receives solid scientific ground for its recognition as an effective method of treatment. In addition, GO is becoming in modern science one of the leading methods for studying the fine structure and properties of water itself, which are visibly manifested in the effects of homeopathic treatment of people and the effect on animals, plants and bacteria [8, 19, 21].

GO is another of the DM areas, closely related to fundamental physical issues of the structure of matter, in particular the structure of water and its information-relaying properties at ultrahigh dilutions of matter [7]. It is here that the most pressing questions of modern physical and medical science are now being resolved, why this area was rightly called quantum medicine [18]. As the conducted research shows, there are grounds in TM for such a consideration of the problem.

Suffice it to say that according to modern views, water and living organisms, including humans, are objects that have

functional system quantum-correlated processes [12]. Therefore, the proposal to investigate in TM the scientific problems of the homeostasis of the organism from the standpoint of quantum physics [8; 17; 21] and the role of elementary particles of the Bose condensate type S-gluons should be considered as a serious application for modern research in this area of knowledge [20].

Long-term problems of using ultra-high potencies (dilutions) preparations in GO were solved after the introduction of the concept of the information-phase state of matter and molecular and field information retransmission as the basis of energy-informational interactions in a living organism [7].

Water appears to researchers as the main keeper and transformer of biological information and as a matrix for regulating biochemical processes, and its information-phase state is the basis for superweak interactions at the subcellular level in DES, discussed above,

However, to study the quantum foundations of GO, it is first necessary to study the deep foundations of molecular-field information relaying, for which it is necessary to carry out extensive research in the field of information relaying of quantum properties of matter [21].

In turn, this requires new approaches to the main subject - GO preparations used in ultra-high potencies. These drugs should be obtained from precisely variable and measurable sources, the actions of which are well known in GO and which could be changed at the request of the experimenters [22, 23].

The author of these studies proposes to use for this purpose physical factors - X-rays in the discrete range from 1 to 100 [22]. Their exceptional advantage is that such drugs at high potencies and even the initial mother solution from which they are prepared does not contain any atoms and molecules, while in GO their action has long been known: for X-drugs it is a mixed miasm , dominant in sycosis. A distinctive quality of these drugs is that they do not contain any substance, and only the wavelength (or frequency) is the active factor subject to research and transmitting information.

Similar reasoning can be applied to the use of a dosed action of a constant magnetic field ("+" or "-" pole) as a preparation made under the action of a constant magnetic field, where accurate information at any potency will depend only on the exact strength of the magnetic field, exposure and " quality "of the field - its polarity (" + "or" - "pole). Experiments of this kind can lead researchers to understand the mechanisms of action of drugs made on the basis of force fields [23].

CONCLUSION

The above materials of research of different levels and specialization in TM show how broad and at the same time fundamentally important are scientific approaches in this rapidly developing field of research,

TM acquired a kind of "second wind" and reached the forefront of modern science thanks to close contact with physicists, chemists,

mathematicians and specialists in electronic engineering, synergetics and homeostatics; such is her broad scope of research work today.

Naturally, as in every developing science, TM faces many scientific and scientific-methodological issues that need to be resolved. They relate both to the theoretical foundations of TM and the direct refinement and improvement of the diagnostic and therapeutic methods themselves: measuring the quantitative and qualitative characteristics of BAP, developing strategies for future research, consideration of factors that contribute to optimal patient care, etc.

In particular, an important place is occupied by the issues of individual differences in the responses of patients to mechanical, electropunctural and bioresonance effects [24; 25]. Success in the use of TM can be achieved only under the condition of a strictly individual approach to the use of diagnostic and therapeutic methods.

In this case, it is important to take into account the heliogeophysical environmental factors, which undoubtedly affect the human body and the results of diagnostics and treatment [26].

First of all, it should be noted here the state of solar activity, lunar phases, geomagnetic activity and the influence of various atmospheric processes, for example, the role of Schumann resonances - atmospherics in the 7.8 Hz range, including also well-known meteorological and weather factors (atmospheric pressure, a sharp change in weather conditions, wind dynamics, partial oxygen content in the air, and a number of others).

Undoubtedly, taking into account the important role of these factors will contribute to the further progressive development of TM in the mainstream of modern science and its successful application in various fields of health care.

LITERATURE

- 1. Karpeev A.A. Traditional medicine in Russia: problems and prospects // Traditional medicine 2000. M.: NPTsTMGMZRF.-P.7-10.
 - 2. Chernavsky D.S. Synergetics and information. M .: Science, 2001.
- 3. Meizerov E.E. Some results and development trends electroreflexotherapy // Results and prospects for the development of traditional medicine in Russia. M .: FNKETsTMDL MZRF, 2002. S. 89-97.
- 4. Materials of the International Interdisciplinary Scientific practical symposium "Ecology and traditional religious and magical knowledge" / Comp .: V.I. Kharitonova, D.A. Funk. M .: Institute of Ethnology and Ethnography RAS, 2001.
- 5. A.P. Dubrov On the change of the paradigm of natural science in the XXI century: Materials of the III interdisciplinary scientific conference "Ethics and Science of the Future". M .: Yearbook "Delphis", 2003.-S. 24-30.
- 6. Nalimov V.V. I scatter my thoughts. On the way and at the crossroads. M $\mathrel{.:}$ Progress Tradition, 2000.
- 7. Zenin S.V. Molecular and field information relay (MIR-PIR) as a basis for energy-informational interactions; Biological and energy-informational properties of water // Traditional medicine 2000. -M .:

NPTsTMG MH RF, 2000. - S. 502-510.

- Zenin S.V. Bioenergoinformatics // Results and development prospects traditional medicine in Russia. M .: FNKETsTMDL MZ RF, 2002. S. 253-254.
- Motoyama H. A Study Yoga from Eastern & Western Medical View Points. Human Science Press, Tokyo, Japan.
- 10. Samokhin A.V., Gotovsky Yu.V. Practical electropuncture according to the method R. Voll. 3rd ed., Rev. and add. M .: IMEDIS, 2001.
- 11. Meizerov EE, Koroleva MV, Gurov AA, Budnikov Yu.F. Topical issues of percutaneous dynamic electroneurostimulation // Results and prospects for the development of traditional medicine in Russia. M .: FNKETsTMDL MZ RF, 2002. S. 97-103.
- 12. Smith CW Quanta and Coherence Effects in Water and living Systems // The Jour, of Alternative and Complementary Medicine. 2004. -Vol. 10. No. 1. P. 69-78.
- 13. Dubrov AP Uknown Factors in Chronobiology // Frontier Perspectives. 2004. -Vol. 12. N2. P. 19-29.
- fourteen. A.V. Bobrov Torsion models in psychophysics. Part I and II // Consciousness and the physical world. M .: Folium, 1997.-Issue. 2.-P.6-24.
- 15. He's the same. Sensory properties of electrical double layers // Paths searches and discoveries: Scientific works of VNITSTNM "ENNOM". M .: VNITSTNM "ENNOM", 2002. S. 55-61.
- 16. Zhang Chang-Lin. Skin Resistance vs. Body Conductivity (On the Background of Electronic Measurement of Skin) // Frontier Perspectives. 2004. Vol. eleven. N 2. P. 15-25.
- 17. Chernikov F.R. The physical nature of homeopathic remedies // Results and prospects for the development of traditional medicine in Russia. M .: FNKETsTMDL MZ RF, 2002. S. 246-248.
- Garillon J.-L., Grabovshchiner A.Ya. Quantum medicine medicine tomorrow // Proceedings of the II International Congress "Weak and superweak fields and radiation in biology and medicine." SPb .: RAS, 2000 .-- S. 78-83.
- 19. Burlakova EB Specific Effects of Superlow Doses of Biologically Active Substances and Low-level Physical Factors // MISAHA Newsletter. 2000. N 30-31. P. 2-11.
- 20. Lupichev N.L. The hierarchy of energy connections in the regulation of homeostasis // Traditional medicine -2000. M .: NPTsTMG MZ RF, 2000. S. 530-532.
- 21. Schulte J., Endler PC (Eds.). Fundamental Research in Ultra Dilution and Homeopathy. Dordrecht: Kluwer Academic Publishers, 1998.
- 22. Upadhyay PP Homeopathic Message for the Material Scientist // Frontier Perspectives. 2000. Vol. 11. No. 2. P. 45-46.
- 23. Upadhyay RP Strategy for Structural Exploration of Homeopathic Medicine // Frontier Perspectives. 2003. Vol. 12. N2. P. 7-8.
- 24. Dubrov A.P. Symmetry of biorhythms and reactivity. M .: Medicine, 1987.
- 25. Kholodny B.P., Uklein A.Ya., Bryantsev S.G. Individual norm in adaptive electropuncture // Traditional medicine-2000. M.: NPTsTMG MH RF,

2000 .-- S. 100-101.

26. Dubrov A.P. Meizerov E.E., Zavitaeva N.F. et al. Medicobiophysical aspects of studying the impact of geophysical anomalies on public health. // Abstracts. and reports. VIII International conference "Theoretical and clinical aspects of the use of adaptive bioresonance therapy." - M .: IMEDIS, 2002. - Part I. - S. 285-301.

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