The concept of the generalized receptor-information system of the body

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The concept of generalized receptor-information system of the human organism

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SUMMARY

Concept generalized receptor information systems provides for the inclusion in the regulatory processes of the body, in addition to the nervous and humoral systems, structured water, which forms cords (meridians, channels) capable of transmitting information from the external environment to human organs and vice versa.

Key words: structured water, information transfer inthe body.

RESUME

The concept of generalized receptor-information system of the human organism includes regulatory processes of the nervous and humoral system as well as structurized water forming meridians and channels capable of transmitting information from environment to human organs and back.

Keywords: structurized water, information transmission in human organism.

Neither the nervous system nor hormones can affect every cell of the body, nevertheless, all cells are informed about each other, since otherwise the processes of synchronous self-reproduction of cells of various tissues, taking into account their three-dimensional structure, could not be coordinated. Since the human body is 60% water, and the brain is 80%, it is logical to assume that specially organized water can be a substrate that instantly transfers information between all cells of the body.

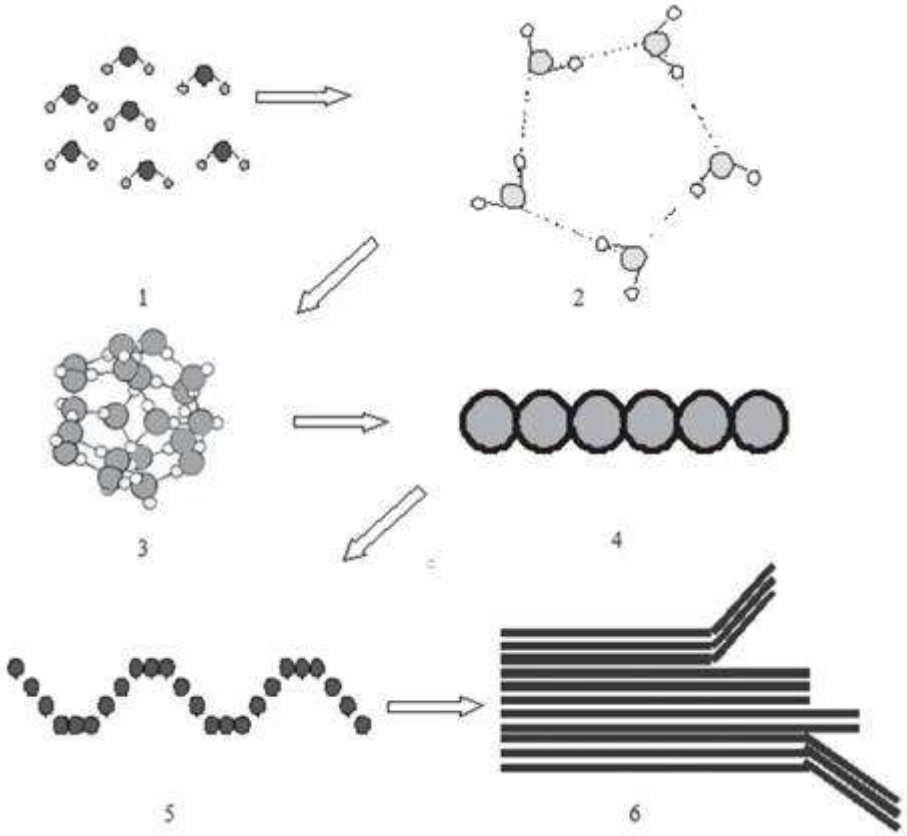
The purpose of the concept is to establish the role of the body's structured water in the transmission of information in the body. Living organisms are complex systems with a large number of internal connections, allowing not only to respond to external influences, but also to adequately maintain their functional state. S.N. Romanov back in 1983 [1]. The implementation of its biological functions by the system involves the receipt of energy and information with their subsequent transformation and transfer at all levels of the organization. Information in this case can be considered as

heterogeneity in the space-time distribution of flows of matter or energy [2], and energy (Prokhorov AM, 1998), as “a general quantitative measure of different forms of motion of matter”. From physiology, specific pathways and structures are well known through which visual, auditory, and other types of information are transmitted and processed. Information coding is realized, obviously, by means of a molecular chemical code [3–5]. The informational capabilities of the humoral system of the body are also known and described in sufficient detail. At the same time, we assume the presence in the body of a multi-stage information and energy system of structured water, capable of providing instant information transfer to all cells [6]. Possible mechanisms for transmitting information in such a system were presented earlier [7].

When water molecules interact with the structural components of the cell, the formation of five-, six-membered clathrates and three-dimensional formations in the form of tetrahedral forms, which may have the ability to form chain structures connected by common pentagonal sides, is possible. At the same time, each of the water molecules in simple tetrahedra retains the ability to form hydrogen bonds. Due to them, simple tetrahedra can be connected with each other by vertices, edges or faces, forming various clusters with a complex structure, which can contain cavities. Water clusters can be structurally similar to crystals of carbon, silicon and their compounds, since the H_2O is capable of forming four hydrogen bonds, and these elements are capable of forming four covalent bonds. Therefore, the structure of water clusters can be similar to the structure of diamond, graphite, fullerene, or various silicate anions. Such a volumetric structure has the ability to reorient, as a result of which the phenomenon of "water memory" occurs, since the new state reflects the coding effect of the introduced substances or other disturbing factors [8]. The French biologist Jacques Benveniste discovered earlier in his studies in the field of homeopathy that “water simultaneously possesses a physical“ memory ”, which allows it, even after a significant dilution of the substance dissolved in it, much lower than the physical presence of the corresponding molecules, to still perceive these molecules biologically ". Water forgets nothing.

S.V. Zenin based on the data obtained by three physicochemical methods: refractometry [9, 10], high performance liquid chromatography [11] and proton magnetic resonance [12] constructed and proved a geometric model of the main stable structural formation from water molecules (structured water), and then, an image was obtained using a contrast-phase microscope of these structures [8]. The structural unit of such water is a cluster consisting of clathrates, the nature of which is due to long-range Coulomb forces. The structure of the clusters encodes information about the interactions that took place with these water molecules. In water clusters, due to the interaction between covalent and hydrogen bonds between oxygen atoms and hydrogen atoms, proton (H +) can migrate according to the relay mechanism, leading to proton delocalization within the cluster. The process of structuring water is observed primarily in

layers of water adjacent to the membranes. The hydration shells of the main structure-forming lipids usually consist of 10–15 layers of water molecules and hydronium ions and are structurally similar to the spatial configuration of the molecules of chemical compounds that make up the structure of the membrane. The conformational features of membrane biomolecules are determined by the structure of the water associated with them; therefore, a decrease in the degree of structural ordering of an aqueous solution leads to a significant change in the conformation and, accordingly, the functional properties of proteins, while it is assumed that the tertiary and quaternary structure of the protein can change. The role of water, which is part of biological fluids (blood, lymph, cerebrospinal fluid, etc.), is still poorly covered in modern literature, but its importance as an information factor is extremely great and requires further understanding. in this case, one should take into account the opinion of I.L. Gerlovin that any impact on water and solutions - electric, magnetic, electromagnetic, ultrasonic, electrochemical - can be explained on the basis of energization of a virtual pair of elementary particles electron-positron [13]. The sequence of the process of structuring biogenic water is shown in Fig. 1.



Rice. 1. The proposed sequence of structuring water in the body and the formation of energy meridians (description further in the text).

In fig. 1: 1 - individual water molecules, 2 - clathrates, flat structures formed by 5-6 water molecules, 3 - clusters, three-dimensional structures, 4 - chains of clusters, 5 - helical chains, 6 - strands, which can be considered a substrate of meridians. This data partially reveals the processes

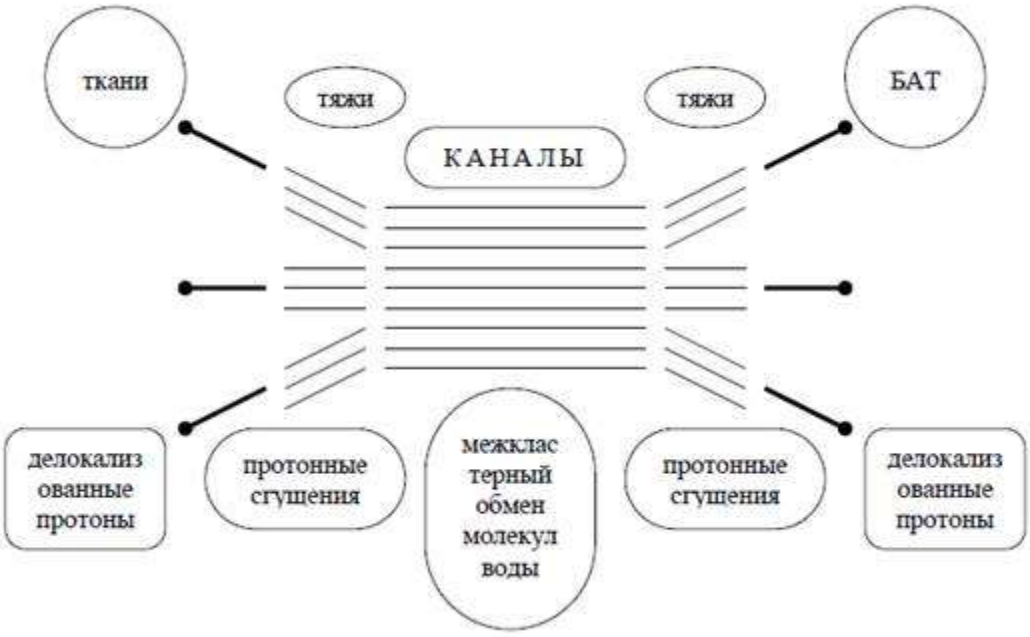
transmission of information in living systems and the possibility of using them for medical and diagnostic purposes.

Specific mechanisms transmission information through structured water can be considered in accordance with the mentioned model in the form of a multichannel receptor-information system, including 3 levels (Fig. 2):

The 1st level - the jump of protons along the spiral of structured water, is most likely characteristic of terminals ending in the area of biologically active points (BAP), on the one hand, and tissues of individual organs, on the other.

2nd - the formation of proton condensations and discharges along the cords (collaterals), consisting of separate spirals and realizing the transfer of information from several BAPs or from internal organs and vice versa.

3rd - intercluster exchange of water molecules, clusters included in the structure of parallel strands, forming the basis of channels (meridians), is the central link in the transfer of information between BAP and internal organs in both directions.



Rice. 2. Multichannel receptor information system of the body (fragment).

Individual clathrates and clusters that have existed for the shortest time can be, on the one hand, a substrate for building more complex structures of this system, and on the other hand, transmitters of information between individual cells.

These data may indicate that if under the influence of any external factor (microorganism, toxin, electromagnetic radiation, etc.)

the informational properties of water change, then the structural and functional components of cells, tissues and organs also change. In our opinion, changes in the informational capabilities of structured water may be the earliest signs of the possibility of pathological phenomena. From these positions, it is interesting to establish the place of structured water in the entire system of information processes in living organisms.

In its most general form, conceptually, the entire receptor-information system of the body, taking into account the degree of generalization or detailing of information (impersonality), can be represented as follows:

- the first, the highest degree of impersonality (awareness) information (at the level of "yes-no", "+ or -", "many-little", etc.) is implemented at the level of the water-structural receptor-information system (involvement of all cells of the body in the information process);

- the second, lesser degree of impersonality of information (more generalized information), is carried out with the participation of ions, peptides, amino acids at the level of cell membranes (certain cells of the body);

- the third, targeted transfer of information (specific, addressed certain tissue and causing changes registered at the level of organs), occurs with the participation of the "mediator-receptor" (nervous system), "hormone-receptor" (hormonal system) systems.

These three components make up a general (generalized) receptor-information system that provides informational interactions, on the one hand, of all structural formations of the body (cells and their organelles, tissues, organs, functional systems) of the "knows everything about everything" type, and on the other - continuous two-way communication of the body with the external environment. The central nervous system (80% water), being a specialized organ for perception, processing, creation of new information and transmission of information, may well function on the basis of all these 3 components. In this case, the opinion of S.V. Zenin that it is necessary to distinguish the primary memory of water in the form of a transformed matrix of structural elements in a cell with the output to the surface of the cell of the faces displaying the pattern of the charge of the acting compound, and a long-term "trace" of the effect of a substance on the structured state of water, when, after repeated coordination of information transfer between the substance and water, a finally transformed matrix of structural elements in the water cell is established [8]. The presented judgments can be a significant addition to our knowledge about the informational processes of the body.

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