SPECIAL CHARACTERISTICS OF ENERGETIC WATER AND ITS INFLUENCE ON HUMAN PHSYCOLOGICAL STATUS

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AbstractThe normal functioning of organisms depend on water in the organism and its properties. The role of water is too big for human life, but most important is that water should be not only safe and "not harmful", but also well suited for constant daily use, rendering beneficial effect on the organism. In the present work different type of water was used to determine ones influence on the quality of life. To measure the quality of life using Profile of Mood State (POMS) questionnaire and Gas Discharge Visualization (GDV) method applied during 6 weeks to people drinking usual water, during another 6 weeks when mineral water was used, and another 6 weeks when the mineral water was taken but after infusing with the natural energetic deposit (BAE Synergy Liquid). Significance of results was provided by the Wilcoxon and Sign statistical tests. After using BAE Synergy Liquid, statistically significant decrease was obtained for the following POMS parameters: tension-anxiety, depression-dejection, anger-hostility, fatigues-inertia, and confusion-bewilderment. At the same time, vigor-activity parameter was increased, as well as GDV parameters: Area and Intensity at the background of back to normal state GDV Activation.

The use of mineral water from the energetic deposit (BAE Synergy Liquid) reduces anxiety and aggression, raises the emotional tone, and also raises the general energetic state of the organism. The GDV method allows to reveal statistically significant distinctions between mineral water and mineral water from the energetic deposit while chemical structure remains the same.

Key words: Gas Discharge Visualization, Profile of Mood State, Bio Active Energy, mineral water, energized water, quality of life.

Introduction

Water is a substance which is used in all processes occurring in organisms. As a universal solvent, water provides delivery of nutrients, microcells and oxygen to all cells of the organism. It plays a key role in the mechanism of thermoregulation and carries out a function of clearing. The normal functioning of the organisms depend on water in the organism and its properties.

Water is a basic energy source for us. If an organism is dehydrated only by 2 %, the working capacity and concentration of attention will be reduced by 20 %. In years, the quantity of water in organism becomes lesser: water in newborn child amounts to 75 % of his weight and will be not more than 65 % after the next five years.

Very likely that quality of drinking water is the most complex and delicate question. According to the World Organization of Public Health Services, more than 80% of human diseases are connected with poor quality of water. Annually there are about 500 million people in the world which are falling ill because of polluted water. Thus, water can be divided into two types. The first type is the water for sustaining life, and the second type is the water which reduces the quality of life.

Water of the first type includes water from the natural sources (springs, artesian chinks, and so forth), while boiled water and tap water formed the second type. Though the boiling still remains the most popular way for improving the quality of water to make it safe, many doctors recommend to drink special drinking water extracted from the natural sources.

Mineral water is water from the underground sources. The main difference from the water running in the tap is a constant chemical compound and increased contents of natural mineral components. Passing through the soil strata, such water is enriched with various mineral substances, microcells, and becomes completely disinfected. Such water possesses certain specific physical and chemical properties, which provide beneficial effect on the organism.

The role of water is too big for human life, but most important is that water should be not only safe and "not harmful", but also well suited for constant daily use, rendering beneficial effect on the organism.

Some experts supposed that the healing properties of mineral water are defined by its chemical compound, i.e. by those salts which are dissolved in it. Such approach assumes an opportunity of artificial preparation of curative mineral water.

Using the modern equipment, scientists have established an exact chemical compound of water and prepared artificial mineral water by way of synthesis. It turned out that it is not very difficult to obtain the artificial mineral water; however, creating the curative properties of such water is not an easy problem.

Obviously, the point is not only in the dissolved substances, but also in the ability of water to accumulate the information. Being pulled out from the big depths (800 meters and deeper), being exposed by high temperatures and high pressures, the water has passed through currently unknown physical-chemical and information processing. It is just the informational component of water that does not manage to be revealed unambiguously using physical and chemical methods.

In the present work, the Gas Discharge Visualization method (GDV-graphy) is proposed for registration of the informational component of liquid 1,2. The information is understood here as a specific configuration, state of energy. This method allows to reveal the weak distinctions of chemically close liquids 2. It is possible to reveal distinctions directly (by using the GDV images of a liquid) and indirectly (by measuring the GDV images of biological objects during receiving of various liquids).

In the present work, reactions of seven volunteers were measured during 6 weeks of drinking mineral water from a source in Malaysia, during another 6 weeks of drinking the same water which was in the natural energetic deposit (so called dilution of BAE Synergy Liquid).

Physico-chemical methods

Detailed physical and chemical characteristics of BAE Synergy Liquid are represented at [7]. In addition to [7], pH test and measurement of Active Form of Oxygen was also carried out.

GDV-graphy method

The principles of GDV-graphy might be described as follows (Fig.1) 3. The subject 1 is placed on a dielectric plate 2. A transparent conductive grid of a special design is applied to the reverse side of this plate. Voltage impulses are then applied by the generator of electromagnetic field (EMF) 5 between the subject 1 and the dielectric plate.

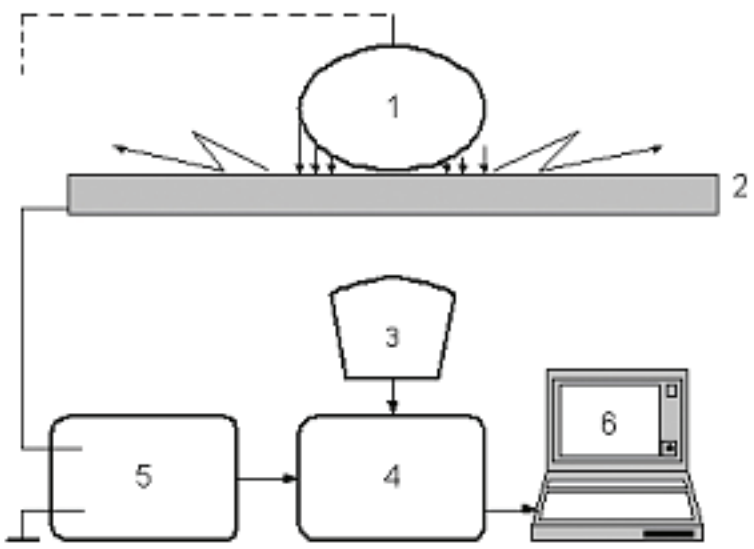

Figure 1. The schematic representation of the device for investigation of GDV characteristics of object and his equivalent scheme: 1 - object; 2 - a transparent electrode; 3 - the optical scheme; 4 - the videoconverter; 5 - electronic blocks, EMF generator; 6 - the processor for the processing of videosignal.

Under the high intensity field, the subject emits a burst of electrons and photons. In the gaseous medium of the contact between subject 1 and plate 2, an avalanche and/or sliding gas discharge (GD) develops, which serves as amplifier of the weak subject's emission 4,5. This process is very similar to the amplification processes in photomultipliers. With the help of an optical system and a CCD-camera 3, (charge coupled device) the discharge's fluorescence is transformed into video-signals, which are recorded in the form of single shots (GDV-grams) or AVI-files in the memory unit 4, connected with computer data processor. The data processor represents a specialized software complex, which allows the calculation of the system of parameters and, therefore, the possibility of drawing diagnostic conclusions.

Despite the variety of technical explanations, the essence of the visualization procedure might be summarized as follows: As a result of the interaction of the electromagnetic field (EMF) with the subject, the emission of charged particles causes the gas discharge to occur from the surface of the subject. It is important to note that the gas discharge itself might influence the subject's state, causing secondary emission and thermal processes.

Thus, within the gas discharge visualization procedure, informative transformations are being formed as follows. A bio-subject's state is characterized by physiological and biochemical processes. From the standpoint of the GDV procedure, the key role is played by quantum emission processes, as well as by the gas release. The gas release depends on the activity of sweet glands, i.e. on the autonomic nervous system functioning. Emission processes are dependent on the bio-subject's level of impedance (resistance or reactivity to the current), impedance of the surface areas, and the bio-subject's structural and emission characteristics. Change of the latter parameters is actively manifested on the skin at the expense of reflexogenous zones and biologically active points.

During the course of their investigations, researchers discovered that a complex of parameters and peculiarities of the organism, relating both to the processes of homeostasis of the whole organism and to the local electro-chemical phenomena, which occur on small part of the skin, are manifested on the GDV image 3.

Of course, using this technique it is easy to measure not only biological object, but also any object of different physical nature.

The technique of the research of liquids by way of investigation of characteristics of the gas discharge around the drops of those liquids has been shown in previous works 1,2.

The GDV image represents a complex two-dimensional figure (Fig. 2).

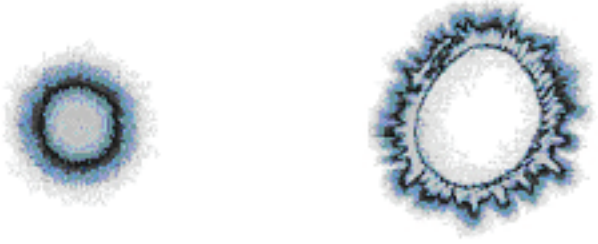

Figure 2. GDV-images of one-normal solution KNO3 (Left) and a finger of a person (Right).

Geometrical and brightness parameters of GDV images bear the information on characteristics of the object. They are: the Area of the image- determined as the sum of pixels which have brightness higher than a certain threshold; Intensity of images - average intensity of image of all points with a non-zero intensity, changing within the range from 0 (absence of glow) to 255 (maximal brightness of glow); Form Coefficient- determined as the ratio of the perimeter length of the image to its average radius multiplied by 2p i.e. irregularity; Informational Entropy by isoline of image - determined as

$$S(M) = -\sum_{j=1}^{J \le M} P_j(M) \ln\left(P_j(M)\right)$$

where $P_j(M)=N_j/N_M$ denotes the distribution function of values of intensities of points by the image isoline, i.e. the probability of revealing the value of intensity j (Nj - quantity of points with the same value of intensity in the image isoline) in the range of points of isoline with length M (Nm - number of all the points in the image's isoline); Fractality - fractal dimension of isoline of the image); and others 3.

The GDV images of liquids have been received with the help of the special device (Fig. 3). The liquid in this device is suspended as a drop above the surface of the screen at the distance of 3 mm. The following most reproducible parameters of GDV image were measured during studies of liquids: the glow Area and Intensity, Form Coefficient, Informational Entropy and Fractality.

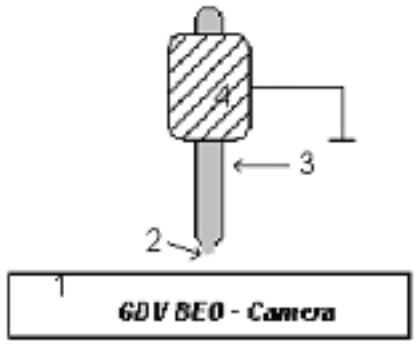

Figure 3. Experimental set for liquid measurement by GDV-graphy: 1-window of the device; 2-drop of a liquid; 3-syringe; 4-grounding

All explorations were carried out in a range of temperatures from 30,5 up to 32,5 degree Celsius with the help of the GDV Camera device.

POMS Test

In the research, the determination of psychoemotional status was carried out. The psychoemotional status was obtained with the help of the POMS (Profile of Mood State) test by definition of six parameters (factors): tension-anxiety (?), depression-dejection (D), anger-hostility (?), force-activity (V), fatigues-inertia (F), and confusion-bewilderment (C) 6. The following equation was used to characterize the psychoemotional potential:

TMD = [(T + D + A + F + C) -V], (1)

- where V, T, D, A, F, and C are values of the POMS test factors.
TMD (Total Mood Disturbance) is another important parameter of POMS Test and it is highly reliable because of the inter-correlations among the six primary POMS parameters.

Experimental Methods

At the first investigation phase, the chemical compound of mineral water was defined with the help of the physical-chemical analysis. Then, the comparisons of mineral water, mineral water after the presence in the energetic deposit, and NaCl solution were performed by the GDV-graphy method.

At the second stage, the group of volunteers of seven people has been investigated to detect their reactions to drinking of mineral water and 100 dilution of BAE Synergy Liquid. The taking of water occurred in three stages: during six weeks the volunteers were drinking mineral water, during next six weeks-they were drinking the BAE Synergy Liquid. At the end of each week, the volunteers passed the POMS test and the GDV images of their fingers were measured.

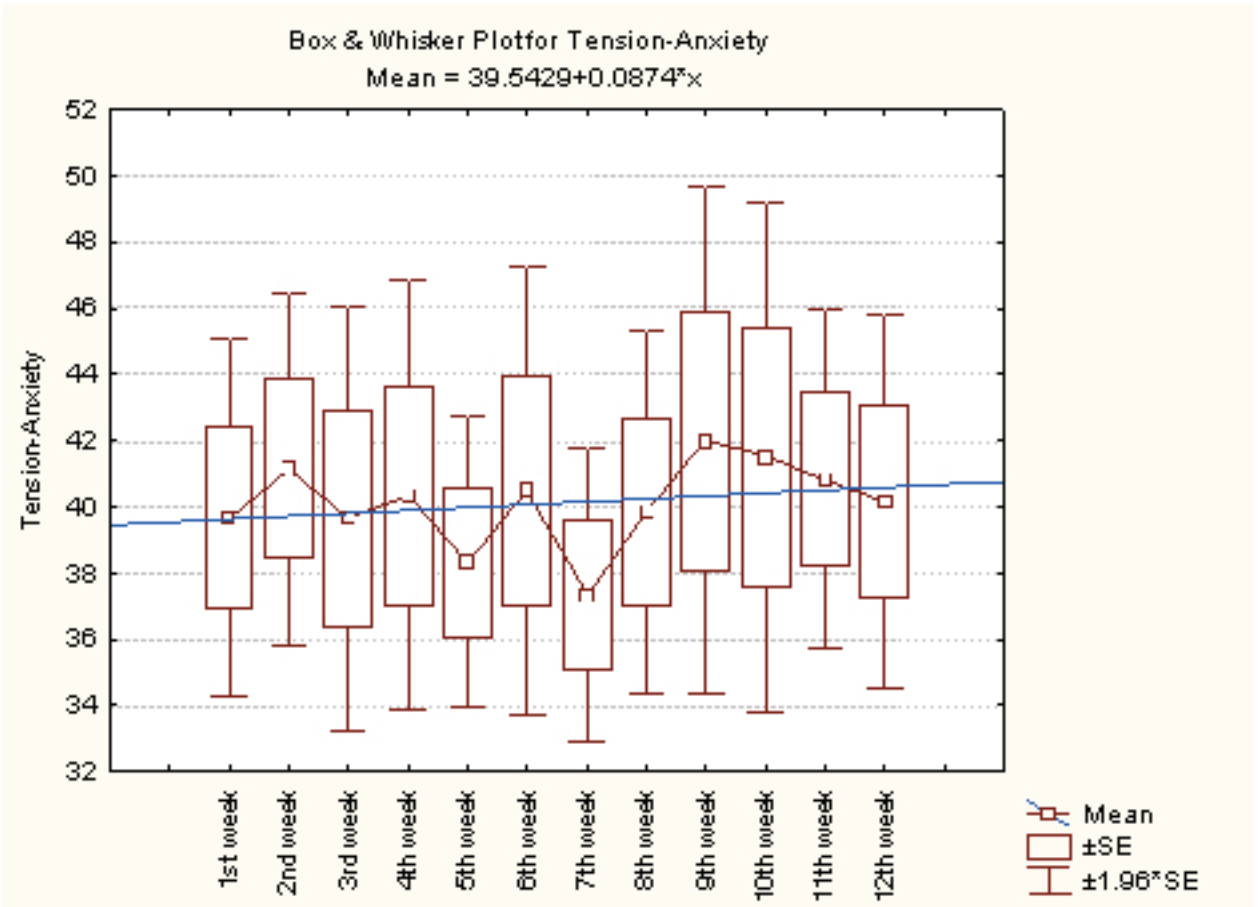

Fig.6. Slight but non-significant changes of Tension-Anxiety index after applying of Olay Moisturizing Cream.

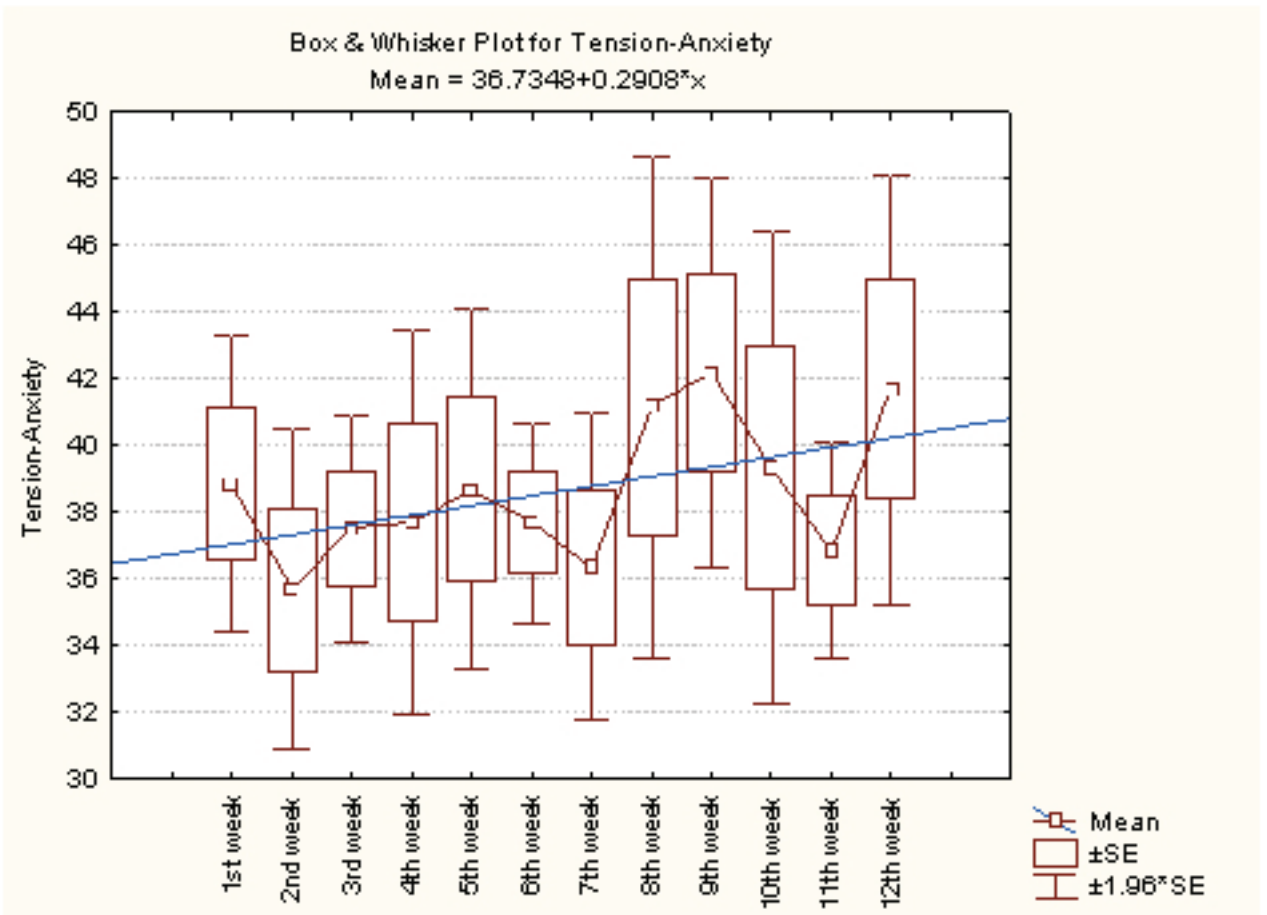

Fig.7. Significant increment of Tension-Anxiety index after applying of Loreal Whitening Cream.

IV. ANALYSIS

It had shown that results of GDV Stress factor gave clear tendency to decrease after using all three types of creams. However, statistical significant changes were revealed only in the case of BAE Synergy Cream by Sign and Wilkoxon tests. Changes are significant even after 1st week of BAE Synergy cream application. Decreasing of GDV Stress factor to the normal range (from 2 to 4) tells that subjects passing to more balanced rate between parasympathetic and sympathetic nervous systems (Fig. 2-4). This means achievement to more controlled and less tense psycho-physiological state.

The above statement can be further supported by the POMS test. Tension-Anxiety index of subjects were reduced during the application of BAE Synergy Cream (Fig.5) whereas it did not have positive changes in the case of other creams (Fig.6,7). The efficiency of BAE Synergy cream is decreasing of stress factor and Tension-anxiety is most significant after 6 weeks of application (Fig.5).

Results
Results of the physical-chemical analysis of water A100 are presented in [7]. The BAE Synergy liquid represents A100 after the presence in the energetic deposit. The mineral water here is the 100 dilution of A100.

pH Study
From experiments, the pH of BAE Synergy Liquid=7.23+/-0.2. Addition of BAE Synergy Liquid has a reaction with slight shifts to alkaline range, in direction of most values of pH of the fluid in human.

The most significant changes had observed in distilled water.

Study of Active
Forms of the Oxygen Many kinds of waters, first of all, artesian, are capable to cooperate with oxygen in air. The part of the energy released in water due to oxidizing reactions, can be reserved in the active forms of the oxygen (AFO). Under entering into the water the donors of electrons (for example, salts of Fe (II) recombine with unpaired electrons presented in AFO water and electrons imported by the donor will occur.

Under the reaction of recombination the portions of energy equivalents to the photons of the visible light are released. If sensitizers of fluorescence are presented at the water it is possible to observe a flash of radiation with help of sensitive detectors of photons.

Under "Activity of water " here is understood as the term intensity (amplitude) and duration of flash of the radiation observable at addition in water of "Reagent" - FeSO4, and a sensitizer of a luminescence - luminal, and registered by the photoelectronic multiplier of the detector of single photons. It is considered, that "activity of water " reflects a stock of that its energy which can be realized as electromagnetic radiation of a light range under entering a reagent into the water of the reagent. From figure 1 follows, that intensity of radiation of sample BAE is essentially higher than the intensity of drinking water sample and sample A100.

The highest intensity of BAE liquid is 240 impulse/0.1 min, for A100 the same parameter is 185 impulse/0.1 min, and 149 impulse/0.1 min for drinking water (St.Petersburg "Rodnik" water).

The presence of such radiation testifies to a high energy potential of liquid BAE.

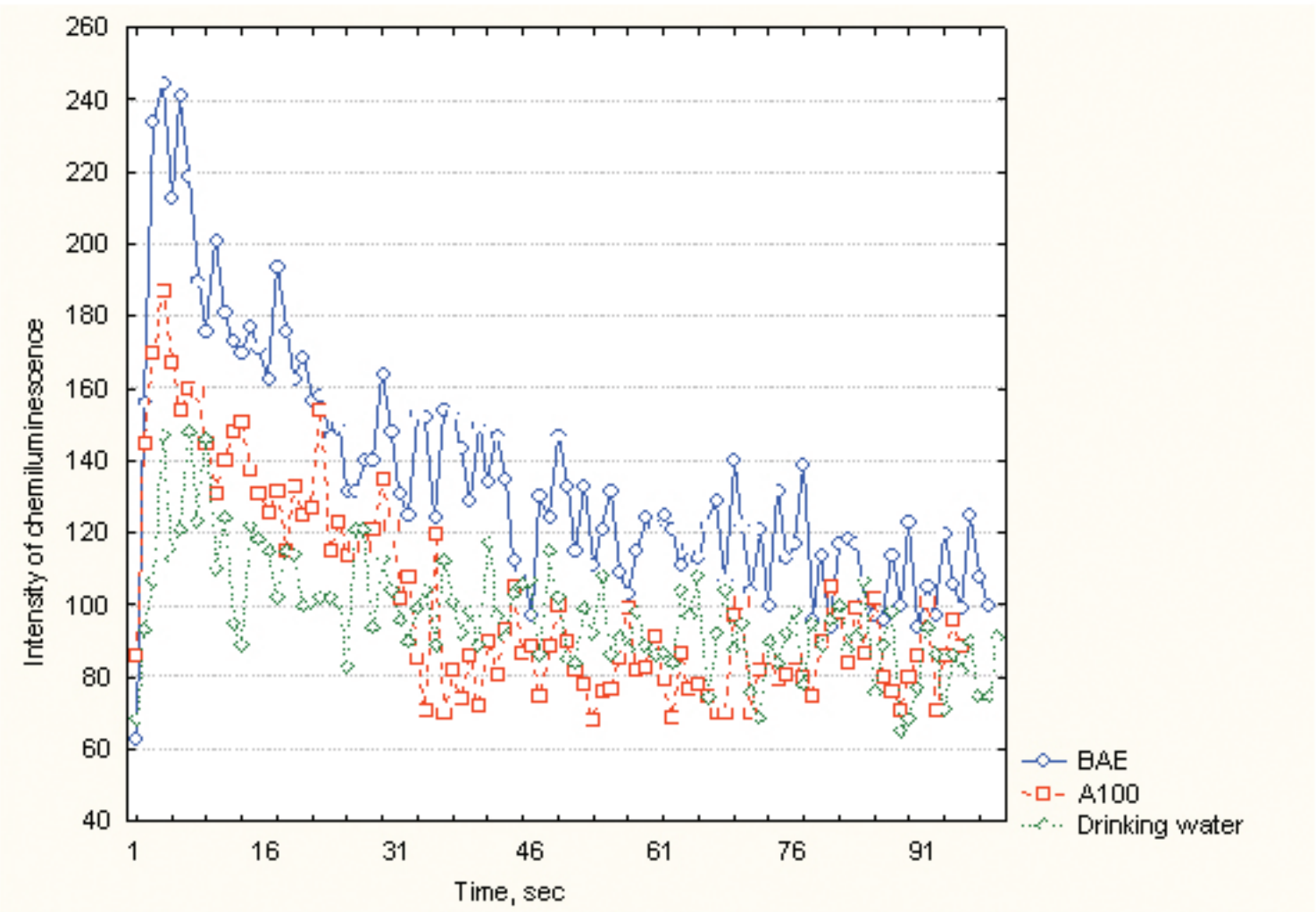

Figure 4. Time dependence of Intensity of chemiluminescence for the different type of liquids.

The presence of chloride and sodium in such a big amount assumes full preservation of the solution; the presence of silver (Ag) is also an additional factor for the preservation. The physical-chemical analysis, however, does not allow to reveal a component representing the influence of the energetic deposit.

The results of GDV-graphy method was shown [7] that the Informational Entropy of the BAE Synergy Liquid dilution has bigger value in comparison with other liquids.

It was shown on the basis of the POMS test that T, D, A, V, F, and C parameters did not significantly change during the 6-week use of regular mineral water. At the same time, after the 2-week use of the BAE Synergy Liquid dilution the significant decrease of values of T, D, A, F, and C parameters took place.

The significant growth of parameter Vigor-activity (V) value occurs after the fourth week of using the BAE Synergy Liquid dilution; this fact characterizes the increase of the positive emotional component and the general energetic state of the volunteers. The significant decrease of POMS test's parameter "Tension-anxiety" is shown in Fig. 5.

Results of measurement of the GDV parameter Activation have not shown significant changes after taking of regular mineral water, but they do have significant distinctions after the use of the BAE Synergy Liquid dilution (Fig. 6).

The Glow Area and Intensity of GDV images of the volunteers fingers were significantly increased after the fourth week of the use of the BAE Synergy Liquid dilution.

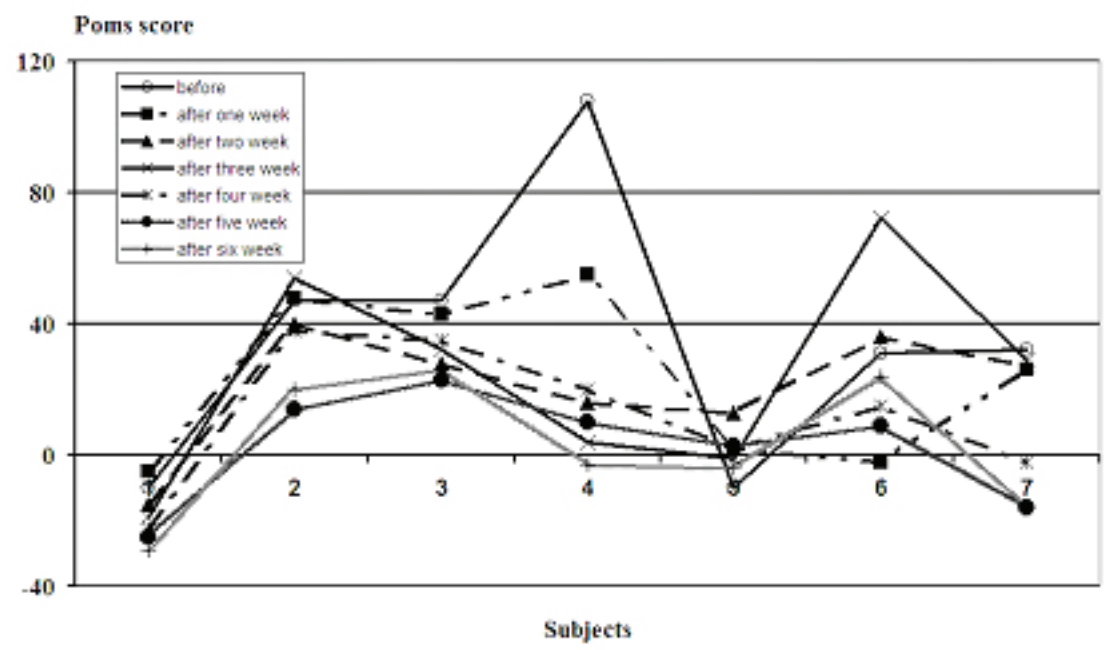

Figure 5. Change of a parameter tension- anxiety for seven volunteers during six weeks.

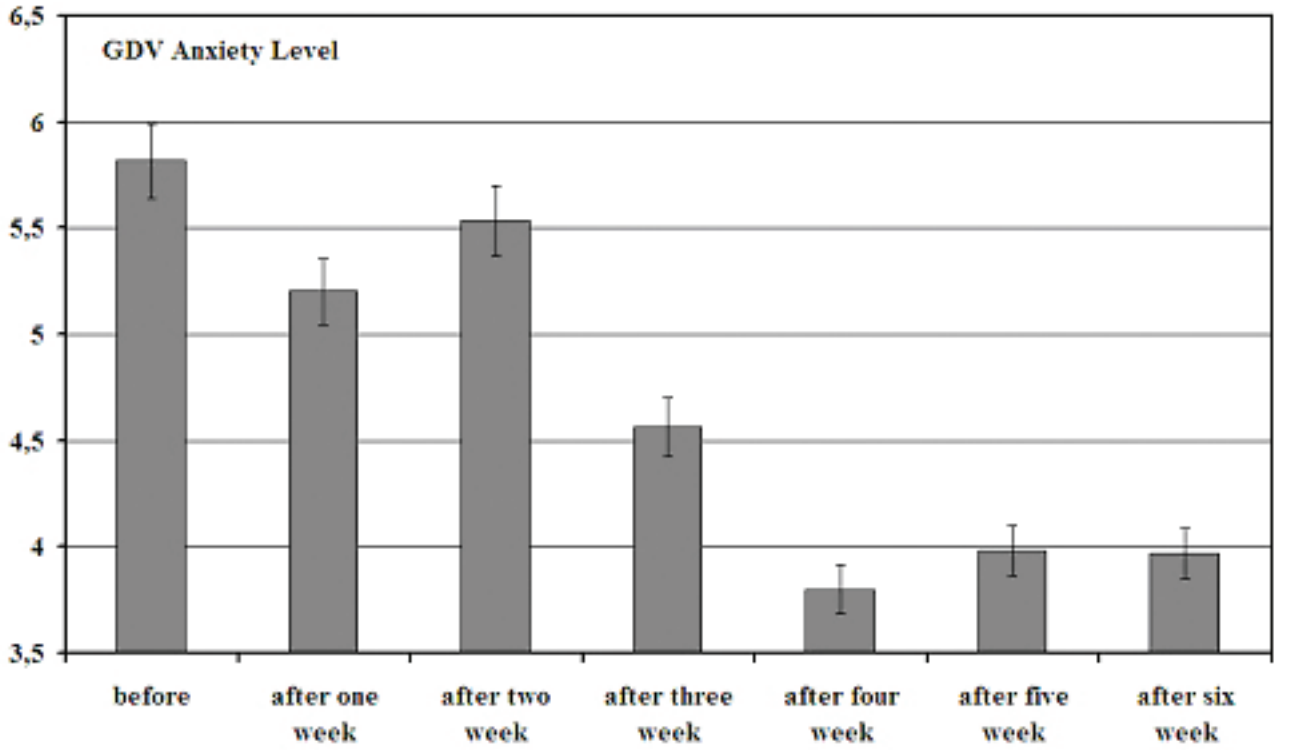

Figure 6. Significant changes of average of GDV Anxiety level during six weeks.

Conclusions
Based on the analysis of the results of the POMS test and the GDV-graphy method, it is possible to draw a conclusion that the use of mineral water from the energetic deposit (BAE Synergy Liquid) able to reduce anxiety and aggression, raise the emotional tone, and also raise the general energetic state of the organism.

It has been shown that the GDV-graphy method allows to reveal statistically significant distinctions between mineral water and mineral water from the energetic deposit (BAE Synergy Liquid) while chemical structure remains the same.

Intensity of chemiluminescence of sample BAE Synergy Liquid is essentially higher than the intensity of drinking water sample and it is also higher than A100 sample. This speaks about its highest energy potential compared to other tested liquids.

Furthermore, BAE Synergy Liquid has a reaction with slight shifts to alkaline range in direction of most values of pH of the fluid in organism. Thus, increased pH of water with the presence of BAE serves as recommendation of using BAE Synergy Liquid for people with acidic body and also as preventive health care.

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