

## System analysis of the possibilities of color diagnostics and color light therapy in cardiological practice

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For millions of years, man was formed and developed in the spectral rhythms of the Sun and the Moon; the rhythmic effects of blue, red and infrared light against the green background of the surrounding nature were evolutionarily significant for the organism.

The human body is able to selectively, with a high quality factor, distinguish the frequency of the influencing electromagnetic radiation, light flux, reacting almost instantly by changing the electrocardiogram, electroencephalogram and blood parameters to the effect of the "individual characteristic frequency" [Builin VA, 2001].

The effect of color on the CNS is mediated by the activity of its color analyzer (specific information channel), in contrast to the autonomic nervous system, on which color has an unconditional effect on the ANS (non-specific energy channel). The relationship between color and the human CNS presents a more complex picture. If for the ANS, color is the quanta of energy entering the body from the outside world, then for the CNS, color, so to speak, is the Quantum of information about the surrounding world [Bazyma BA, 2007]. Thanks to certain parts of the central nervous system, color sensations are formed in a person, and the integrative activity of the central nervous system ensures the functioning of color perception and more complex forms of information processing. Specific lesions of the central nervous system can lead to a person's loss of the ability to perceive colors in part or in full, the so-called color agnosia [Chomskaya ED, 1987]. Color, as energy, is necessary to maintain the tone of the central nervous system. There are known cases of the so-called "color starvation", when, with the color poverty of the surrounding landscape and environment, symptoms of asthenization developed. Children who have been living for a long time in conditions of "color starvation" even have delays in intellectual development. What structures and functions of the central nervous system require color exposure for their normal development? This question remains unanswered to date. there are even delays in intellectual development. What structures and functions of the central nervous system require color exposure for their normal development? This question remains unanswered to date. there are even delays in intellectual development. What structures and functions of the central nervous system require color exposure for their normal development? This question remains unanswered to date.

The energetic side of the color effect on the central nervous system is clearly insufficiently studied. The facts available in color psychology are fragmentary, fragmentary. Color preferences provide indirect information about the nature and direction of the color effect on the central nervous system. Thus, it was revealed that the level of bioelectrical activity (UBA), determined using an electroencephalogram and reflecting the degree of activation of the central nervous system, is reliably associated with the preference for certain colors of M. Luscher's test. When the central nervous system was activated, a preference for violet, red and yellow colors was observed, while during inhibition, on the contrary, these colors were rejected. In general, a low UBA (CNS activation) corresponded to a preference for the colors of the red-yellow part of the spectrum over the blue-green, while for a high UBA (CNS inhibition) the opposite relationship was observed. This tendency manifested itself especially clearly in the range of the alpha rhythm. At the same time, the fact was also noted that

the subjects with a low UBA rate their state as more active, vigorous, and efficient than those with a high UBA index.

Clinical observations of color effects on humans, as well as data from the psychology of color, allow us to give the following psychophysical and psychophysiological characteristics to the main colors [Bazyma BA, 2007]. L.N. Mironova (1984), analyzing the differences in color preferences depending on age and educational level, showed that simple, pure, bright colors act on a person as strong, active stimuli. They satisfy the needs of people with a healthy nervous system: children, adolescents, young people, people of physical labor, open, simple and straightforward natures. Complex, low-saturated, diluted shades are more calming than exciting, cause more complex sensations, reflect the needs of subjects of a sufficiently high cultural level and are preferred more often by people of middle and elderly age, intelligent work, persons with a tired and finely organized nervous system. In the studies of T.P. Teterina (2001) found that the red and green colors of the visible light spectrum can provide information about the state of rhythmic inter-monocular relationships and interactions in the act of binocular vision and excitatory-inhibitory processes in the visual system. Therefore, these colors can be used for a diagnostic test not only for pathology of the visual system, but also for pathology of the central nervous system.

The aim of our study was to conduct a systematic analysis of the results of diagnostic methods (M. Luscher's test) with a subjective assessment of patients by the choice of six colors (red, orange, yellow, green, blue, violet) and to objectify these data with the results of segmental functional diagnostics (SFD), vegetative resonance test (ART) by colors, chakras and induction programs in 32 patients (20 men and 12 women) aged 50-60 years.

Clinical studies were carried out in a specialized cardiology department of the JSC "Metallurg" sanatorium (Izhevsk). The objects of observation were patients with multicomponent cardiovascular pathology: after acute myocardial infarction (AMI), coronary artery disease with progressive angina pectoris, hypertension, dyscirculatory

encephalopathy of mixed genesis, FNK II, III; HI, I - II Art. early recovery period.

At the stage of diagnostic research identified the following patterns: according to the subjective assessment of colors (M. Luscher) at the majority of patients - men with acute myocardial infarction (AMI), the dominant colors that they liked the most were red, green and rejected - blue, purple, less often orange. In coronary artery disease with progressive angina pectoris, the priority "favorite" was chosen blue or orange, and in women - yellow, green, blue, and in all cases red was rejected, in the presence of concomitant hypertension (HD) - blue, both in men and women.

According to the results of SFD, all convalescents of AMI and IHD revealed the presence of the severity of urogenital, endocrinological, cardiorespiratory syndromes, with concomitant hypertension - cerebral syndrome.

According to ART, the choice of colors by nosology was distributed as follows: in convalescents of AMI - blue, purple, coronary artery disease with progressive angina pectoris - red, orange, green, and with the presence of hypertension - yellow, indications of disorders mainly in

1, 6, 7, and 4th chakras, In all cases, the use of IR, UV radiation, white polarized color and induction programs of stress II, III (No. 9, 10), depression II, III (No. 13, 14) clearing the mind (No. 21), neuro-humoral regulation 1.

When combined AMI or ischemic heart disease with essential encephalopathy varia hypertension, the following induction cerebral programs (No. 15), clearing the mind (No. 21), in all cases - a neuro-humoral regulation program 1.

On the basis of the revealed patterns for carrying out color therapy, the following light-puncture combinations were selected (methodical recommendations "Color light therapy", part II, nosologies: hypertension, angina pectoris, heart failure). For the implementation of color light therapy, the apparatus "MINI-EXPERT-TsT" (Center "IMEDIS", Moscow) was used.

The course of color light therapy was started according to the 3-point heart failure treatment scheme according to the methodological recommendations "Color light therapy, part II, p. 203. (Gotovsky Yu.V. et al., 2003).

#### Heart failure

##### Localization

t. 1 AP point Le 2 (yun-men) on the left, located on the left under the acromial end of the clavicle, in the depression between the deltoid and pectoralis major muscles, 6 tsuni outward from the anterior midline;

t. 2 AP point Po 25 (shen-tsang) on the left, located on the left in the 2nd intercostal space, 2 tsun outwards from the anterior median line;

v.3 AP point Psr 17 (tan-chzhun), located on the anterior midline, at the junction of the lower and upper quarters of the sternum body, on the horizontal line of the nipples - level 4 of the intercostal space.

##### Therapy scheme

All three points are irradiated in the indicated sequence: v.1,2,3 Orange once a day for 60 sec. each one.

Note. Heart disease can be treated with Blue or Orange colors, of which Orange is indicated in cases of heart failure, and Blue is indicated for complaints of spasms in the region of the heart.

Further, the treatment regimen for ischemic disease with the IR spectrum was applied according to the guidelines "Color light therapy", part III, p. 218.

##### Localization

zone 1 - the center of the zone is located in front in the middle of the left sternocleidomastoid muscle;

zone 2, 3 - the center of the zone is located in front in the second intercostal space on the left and right near the sternum;

zone 4 - the center of the zone is located in front of the fourth intercostal space along the left midclavicular line;

zones 5, 6 - the centers of the zones are located behind the paravertebral left and right

between D3 and D4 vertebrae;

zones 7, 8 - the centers of the zones are located behind the paravertebral left and right at the level of the D5 vertebra;

zones 9, 10 - the centers of the zones are located behind the paravertebral left and right between the D6 and D7 vertebrae.

Therapy scheme

In case of violation and without violation of the heart rhythm: IR irradiation of zones 1, 3, 2, 4 in front for 1-2 minutes for each zone in the sequence shown.

With concomitant osteochondrosis of the spine with radicular syndrome and reflex angina pectoris: IR irradiation first of zones 3, 2, 4 on the chest, and then zones 5, 6, 7, 8, 9, 10 on the back for 1-2 minutes for each zone in indicated sequence.

During the application of the e specified schemes applied daily above induction programs in combinations with color light therapy sequentially, in the presence of sop hypertension twice per week, treatment was carried out using the proposed below sequence of combinations according to Color methodical recommendations Light Therapy, Part II, pp. 176–178.

Hypertension, specific treatment stage

1

Localization

The therapeutic combination uses one paired point:

T. 1 AP point Same 36 (tszu-san-li), located on the left and right legs, 3 tsun below the patella, 1 tsun outward from the anterior edge of the tibia, at the outer edge of the anterior tibia.

Therapy scheme

Both points of point 1 on the left and right legs are irradiated for 30 s each, preliminary by palpation, determining a more painful point, which is irradiated with Blue, and the other with Orange.

Stage 2

Localization

The therapeutic combination uses one paired point:

t. 1 AP point TI 11 (qu-chi), located on the left and right arm, in the corner of the skin fold formed when the arm is bent at the elbow joint, in the middle of the distance between the outer armpit of the humerus and the radial edge of the skin fold of the ulnar fold.

Therapy scheme

Both points of point I on the left and right hand are irradiated for 30 s each. Previously, by palpation, a more painful point is determined, which is irradiated with Green, and the other with Red.

Stage 3

Localization

In the therapeutic combination, one pair point is used.

T. 1 AP point Mp 62 (Shen-May), located on the left and right legs, under the lateral ankle, in the depression at the lower edge of the projection of the peroneal block of the calcaneus

Therapy scheme

Both points on the left and right legs are irradiated for 30 seconds each. Previously, by palpation, a more painful point is determined, which is irradiated with Violet, and the other with Yellow.

Stage 4

Localization

The therapeutic combination uses one paired point

T. 1 AP point Po 1 (yong-chuan), located on the left and right foot, on the plantar surface, between the 2 and 3 metatarsal bones, on the border of the anterior third and the posterior two-thirds of the sole, in the depression formed when the toes are bent.

Therapy scheme

Both points of point 1 on the left and right soles are irradiated for 30 s each. Previously, by palpation, a more painful point is determined, which is irradiated with Green, and the other with Red.

Stage 5

Localization

In the therapeutic combination, one pair point is used.

T. 1 AP point Sp 4 (gun-sun), located on the left and right legs, on the medial edge of the foot, in the depression at the antero-inferior edge of the base of the 1st metatarsal bone

Therapy scheme

Both points t 1 on the left and right feet are irradiated for 30 s each. Preliminarily, by palpation, a more painful point is determined, which is irradiated with Green, and the other with Red.

6 stage

Localization

The therapeutic combination uses 4 paired points:

T. 1 AP point T 4 (he-gu), located on the left and right hand, in the interval between 1 and 2 metacarpal bones, closer to the radial edge of the middle of the 2nd metacarpal bone

Therapy scheme

Both points of point 1 on the left and right hands are irradiated for 30 s each. Previously, by palpation, a more painful point is determined, which is irradiated with Blue, and the other with Orange.

7 stage

Localization

In a therapeutic combination, 3 points are used:

t. 1 LP point Se 7 (shen-men), located on the left and right hand, in the cavity between the pisiform and ulna, on the transverse skin fold of the wrist-radial joint, at the radial edge of the ulnar flexor tendon of the wrist;

t. 2 AP point Le 10 (yu-tsz), located on the left and right hand, at the middle of the 1st metacarpal bone, on the border of the dorsal and palmar surface of the skin;

t. 3 AP point Kr 5 (jian-shi), located on the left and right arm, between the tendons of the long la-bottom muscle and the radial flexor of the wrist, 3 tsun above the radial-wrist joint;

v. 4 AP point Kr 7 (da-lin), located on the left and right hand, on

transverse skin fold of the metacarpal joint, between the tendons of the long palmar muscle and the radial flexor of the wrist.

Therapy scheme

For each paired point, a more or less painful point is preliminarily determined by palpation, which is then irradiated for 30 seconds each in the specified sequence

for point 1 - a more painful point is irradiated in Blue, and the other - in Orange;

for point 2, the more painful point is irradiated with Green, and the other with Red;

for point 3, the more painful point is irradiated with Blue, and the other with Orange;

for point 4 - a more painful point is surrounded by Blue, and the other - by Orange.

8 stage - the final stage of treatment

Localization

The therapeutic combination uses 3 points:

v. 1, 2 AP point TI 15 (jian-yu), located on the left and right between the acromion and the large tubercle of the humerus, in the depression formed when raising the hand,

T. 3 CP point of the psyche, the main one, corresponds to AP point Zsr 19 (hou-din), located behind the head 1.5 tsun higher than AP point Zsr 18 (tsiang-jian) or 3 tsun from AP point Zsr 17 (nao -hu).

Therapy scheme

The points are irradiated with Blue color for 30 s each in the specified sequence, which must be strictly observed: v. 1, 2, 3.

Note

It is recommended to measure blood pressure before and after therapy in order to adjust the dosage of medications prescribed for the main treatment of the disease.

On the day of application of color light therapy for GB, other methods of color therapy are not carried out. Induction programs are recommended to be performed before or after color light therapy, sequentially or at intervals of 2-4 hours.

#### The discussion of the results

The phenomenon of color preference should be attributed to one of the central in the field of color semantics. The fact of the emotional attitude of people to flowers is so obvious that it does not need proof, and, nevertheless, it is mysterious. A person belongs to any shade of colorestimated, because any color inevitably evokes in his soul a feeling of sympathy or antipathy. Simply put, colors cause emotions, and emotion necessarily contains an evaluative component [Yanshin PV, 2006].

In the group of convalescents of AMI due to stress due to a heart attack, the revealed preference for red or green is an indicator of volitional tension. As soon as the state of exhaustion sets in, the patient rejects the blue and purple colors as unsympathetic. A weakened nervous system defends itself against this energized color cast. IN

In this state, the patient complains that he is suffering from oppression or a harsh situation and perceives it as violence against himself. He tries to evade demands, because even ordinary tasks seem extremely difficult to him, and these difficulties are perceived by him as opposition or even as personal ill will and humiliation. As a result, anxious and tense anxiety, fussiness and a search for excitement arise in order to avoid trapping atony or even depression in such a meaningless lifestyle.

In convalescents of coronary artery disease, a general, mental and somatic state was revealed. They can no longer withstand stimuli, so they reject the exciting red color. They are in a state of overexcitation and easily irritated, therefore they prefer dark blue, as they seek peace, relaxation and relaxation. Their goal is to be able to live in peace and harmony. At the same time, if the state of tension is fixed for a long time, or the patient too often gives preference to the blue-green color, then this indicates physical overstrain and the presentation of increased requirements for his neuro-somatic endurance. They strive for self-confidence and confidence in general.

With concomitant hypertension, the revealed denial of red or another primary color (blue, green, yellow) indicates that the patient is afraid, but not of the dye, but of the effect this color has on his feelings, for example, excitement when the color is red or yellow in cases of lack of friendly ties in the team, the desire to win recognition through superiority.

At the same time, yellow as a stimulus for hope is an incentive not to plunge into frustrated or depressive relaxation.

The colors red and blue (as well as their combination - purple) have a close relationship with various forms of love experiences. People, especially women, who suffer from failures in love, since they are attached to one partner who gives them torment and does not bring feelings of satisfaction and security, strive for a state of calm harmony and prefer dark blue. Suffering from excruciating explanations and quarrels, they cannot stand any additional arousal and reject the orange-red color as

unsympathetic, i.e. choose the same color as vascular disease. This is no coincidence. love symbol.

and people suffering from cardiac heart - the most famous

With a detailed analysis results ART "IMEDIS-TEST" at of convalescents AMI, IHD and HD in all cases, the colors they rejected according to M. Luscher's test turned out to be the main ones in the scheme of color light therapy and almost completely coincided with the methodological recommendations proposed for the treatment of these nosologies. Moreover, the features of the clinical course of the disease were confirmed by an adequate choice induction programs in the complex treatment of these diseases.

The guidelines (for ART) revealed by us for the use of white polarized color and UV range are for further study.

Thus, M. Luscher's color test and monitoring by the ART method "IMEDIS-TEST" makes it possible to observe mental processes, clinical course and the choice of the color light therapy algorithm when given

diseases. The use of color light therapy allows you to influence the pathogenetic mechanisms of OMI, IHD, HD and optimize the effectiveness of complex therapy.

#### Literature

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