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Initial course of remote training of doctors  
on a problem: "Functional biodiagnostics and  
Correction of vegetative infringements at children".*

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76.29.47-pediatrics; 76.35.35-rehabilitation;  
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*... According to recommendations the CART of one of  
bases of medicine at the present stage should become  
electro diagnostics on points of acupuncture and reflex-  
otherapy ... [the International meeting the CART on  
traditional medicine. Yerevan, 19-20.09.2003].*



**IS FUNCTIONAL-VEGETATIVE SYSTEM OF THE PERSON.  
PROBLEMS OF IDENTIFICATION OF TRADITIONAL CHANNELS  
CHZHEN-TSZJU OF THERAPY AND CLINICAL DIAGNOSTICS OF  
VEGETATIVE INFRINGEMENTS (message-4).**

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**The resume.** The original methodology is developed, allowing to identify system dependence at level of separate biological objects and to supervise pathogenetic mechanisms of development of vegetative infringements and their functional correction

**Keywords.** Is functional-vegetative system of the person, a problem of vegetative diagnostics, identification of channels of traditional Chzhen-tszju of therapy

**The short preface.** Problem lecture "... Identification Problems акупунктурных channels and clinical diagnostics of vegetative infringements" is devoted the unknown person before Is functional-vegetative system of the person (FVS) and is a fragment of proofs of its biophysical reality. In lecture it is used following designations acupuncture the channels (meridians), traditional which name is presented today by concept about interdependent functional systems: LU - Lungs, a LI-thick intestines, a ST-stomach, a SP-spleen (pancreas), HT-heart, a SI-small intestines, a BL-bladder, KI-kidneys, a PC pericardium, a TE-threefold heater (lymphatic system), a GB-gall bladder and a LR-liver.

Analogs the presented experimental materials aren't present.

**Research objective** - the information of the scientific and medical public on the unknown

person before is functional-vegetative system of the person. Open phenomena confirm a biophysical reality acupuncture channels (meridians) of traditional Chzhen-tszju of therapy, its system character and the direct relation to a vegetative homeostasis. Biophysical audit of traditional positions specifies in a number of theoretical and practical errors that demands additional specialization of experts and corresponding correction of curriculums.

**Materials and research methods.** Supervision over functional (vegetative) health of the children's population of Ukraine were spent under the Program "System of two stages of rehabilitation of vegetative infringements at children living in a zone of radiating control of Ukraine" (Commissions of the Cabinet of Ukraine №1861/4 and №12010/87)" on the basis of an original method of vegetative biodiagnostics (on V.Makats) [1-2; 4-9; 15-16]. Its methodology is proved by unknown earlier biophysical phenomena, has original standard base and is characterized by comparability of the received results at repeated researches. Under the Program it is surveyed more than 18.000 children of a different floor and age.

**Results of research and their discussion.** The detailed analysis of the specified problem is necessary, for the open system not only confirms hypothetical canons of Chinese Chzhen-tszju of therapy, but also has specified in its direct relation to a vegetative homeostasis. So, about vegetative problems modern east and the West th of therapeutic philosophy...

The Science of autonomic disorders as the science inherently is an interdisciplinary problem for practically there is no pathology in illness development and health development which the vegetative nervous system (VNS) wouldn't take part. It renders indispensable and sometimes solving influence on the organization of adaptable processes, maintenance and support of a functional internal homeostasis. Differently clinical displays of vegetative dysfunctions concern the most frequent symptoms of medical practice. Thus their wide prevalence is observed even among the population considering almost healthy.

On the basis of the anatomic-functional analysis neurologists allocate two base departments Vegetative nervous system (VNS): Over the segmentary and segmentary, paying pathologies of the last more steadfast attention. Experts believe that it corresponds to certain anatomic structures and if defeat internal vegetative neurons forms a syndrome of vegetative insufficiency involving vegetative a short nervous shoots manual and foot nerves - defines character of a vascular - a strophic syndrome Thus somehow the attention that, except vegetative neuropathies, VNS the main role in maintenance of dynamic stability of a functional homeostasis, psychophysical activity, softening and liquidation of consequences of stress ... belongs isn't paid.

Today the world community of experts uses two terms in definition VNS: Vegetative nervous system (the Russian-speaking and German-French-speaking countries) and Independent nervous system (the English-speaking population). The last, by the way, begins is proved to dominate because of functional features VNS. And it is quite justified, for the area of attention clinical aspects of independent nervous system is much wider than zone internal displays! Thus, without underestimating a role of leaders in the history development domestic vegetative science, we will note insufficient working out of objective methods of the analysis of vegetative frustration (first of all a vegetative homeostasis) which in certain degree have become outdated and don't correspond to modern representations about the organization Live and value of power information transformations. Besides we ascertain presence of two directions modern vegetative science: anatomic aspects of independent

nervous system as which recognize mainly neuropathologists, and functional aspects of independent nervous system as which it is necessary to recognize and widely to use in therapeutic practice and especially in pediatrics.

The today's chemotherapy has practically settled the potential possibilities and has raised the question about working out of integrated methods of therapeutic rehabilitation. It is thus conclusive it is proved: health of the children's population is ecologically dependent; the quantity of vegetative frustration at children and functional diseases on their basis constantly grows; the allergy at rising generation exceeds admissible to imagination levels; it is a shame to speak about a condition of functional health of children, and it is terrible to think of demographic prospect! And on an immemorial yesterday's question "What to do? Today it is necessary to search for the adequate answer ...

The decision of the International meeting the CART on traditional medicine [Yerevan, on September, 19-21th 2003] became an example of one of them. The real variant of its decision is presented by an innovative direction "Functional biodiagnostics and correction of vegetative infringements at children (school of thought of the professor of V.Makats)" which methodology is developed on the basis of opening of the unknown person before his functional-vegetative system of the person.

Direction use in pediatric practice has appeared rehabilitation attractive and perspective in respect of revival of out-patient prophylactic medical examination of the children's population for provides regular control and an estimation of its functional (vegetative) health on the basis of modern biophysical ways of control. Thus modern theorists understand value of biophysical transformations for ability to live of an organism and recognize that rehabilitation factors of small intensity should correspond to biophysical parameters Live and have information to a component.

Understanding that introduction of new rehabilitation technologies process rather labor-consuming and to criticize apologists of all colors without powerful arguments business ungrateful, we pay attention at once to the following.

1) The rehabilitation technology Developed by us and substantiated conclusions are based on experimental, accessible to any control and check, a material (more than 18.000 supervision over children).

2) On the basis of an experimental material it is opened unknown his earlier functional-vegetative system of the person, is proved its identity with theoretical bases traditional Chinese medicine (TCM; Chzhen-tszju therapy) and the direct relation to a vegetative homeostasis.

3) Became obvious necessity of revision of the base therapeutic and rehabilitation concepts based on out-of-date materialistic theories, the impartial information of the wide public on the revealed modern reality and its prompt introduction in applied medicine. Thus, proceeding from modern conditions of demographic degradation, it is necessary to agree that "death Delay similarly" ...

And, at last, without excessive modesty we will notice that the cycle of scientific articles offered experts has no world analogs and is the end result long (1975-2011) research and organizational- activity. The expediency of their wide publication is caused by clinical problems of the pediatrics destroyed by system of children's prophylactic medical examination and necessity of use in applied medicine of the integrated approach in the decision of base questions of a vegetative pathology.

Therefore we will consider the lifted problem stage by stage not from the point of view of the neuropathologist-organic chemistry, and from the point of view of the functional clinical physician. Thus brought to attention of readers the information will be based on opening the unknown person

before a biophysical reality - Is functional-vegetative system of the person. Whether it Will be possible, to judge not to us. But we hope that the problem of integrated functional diagnostics and controllable rehabilitation of vegetative frustration at children will find the readers and followers.

It is in summary considered by a debt to note with gratitude the international value of the Russian Academy of Natural sciences, whose social and scientifically-organizational activity promotes presently scientific integration of the post-Soviet territory ...

**Modern problem of functional health of the children's population.** It is extremely accurately stated in the newspaper "Facts" (Ukraine, 3.11.2011, p. 2) with a bright table of contents: "According to the United Nations in 40 years the population of Ukraine will be reduced [with 55] to 26 million persons"... So,

*"A state of health of Ukrainian children on the verge of accident. Real indicators of expected life expectancy testify to it (for comparison: in Ukraine this indicator makes 60 years, and in Sweden, Iceland, Switzerland – bank), the population of Ukraine will be reduced to 37 million. And according to the United Nations forecast, to the middle of this century in our country remains about 26 million inhabitants... Disease of children of school age, according to National academy of medical sciences of Ukraine, has over the last 10 years grown almost on 27%. If in the first classes more than 30% of children have chronic diseases, to the fifth class of such schoolboys already half, and in the ninth – 64%. As a whole only 7% of the Ukrainian schoolboys have satisfactory functional health...*

*Already in the first class of a deviation in work of the mhe impellent device have 11 % of children, nasopharynxes – 25 %, nervous system – 30 %, digestive organs–30 %, allergic displays are fixed at 25 % of pupils. From the first on the ninth class sight falls in 1,5 times (so-called illness of the honors pupil), approximately in the same degree the bearing and a condition of digestive organs worsens. And diseases system of internal glands are aggravated in 2,6 times. At the same time only 5 % of pupils are enlisted in special medical group.*

*Data of Institute of pediatrics, obstetrics and gynecology AMS of Ukraine according to which, only 6-10% of teenagers at the age of 12-18 years are [rather healthy, at half of young men and 65 % of girls reserves of adaptable possibilities low or below averages have appeared even more sad... and ... according to parliamentary hearings "the Youth for a healthy way of life" at 27% of the Ukrainian population simply doesn't suffice money for a high-grade food "...*

Depressing statistics is supplemented with the following.

Today under the pressure of incontestable facts it is officially recognized: functional health of rising generation is ecologically dependent. And not without reason the states of the European region in 2007r. Environment and health of children” (CEHAPE) to which it promised to be connected and Ukraine have started program realization“. Thus attracts attention the Organization message on safety and cooperation in Europe (OSCE): "... In Ukraine there were only 6% of non-polluting territory, and behind a rating of institute Blacksmiths (USA) the state has got into ten the most polluted industrial centers of a planet". And it doesn't surprise. On materials of Institute of a demography and social researches of National Academy of Sciences of Ukraine our men live on 12-13, and for 8-9 years it is less than woman, than in the European Union, and for 2006r. In Ukraine has died 222 children born from liquidators of failure on the Chernobyl atomic power station (ЧАЭС)...

And only therefore problem indicators of functional health of children should receive the official status of biological indicators of an ecological condition of environment of their dwelling which essentially forms negative demographic dynamics.

Understandably the decision of the arisen problem doesn't cause enthusiasm in representatives of any level of the power for there is a necessity of return to base principles of the Soviet public health services, restoration of the destroyed system of prophylactic medical examination, fair budgetary redistribution in favor of unique state Elite - the growing up children's population (!) and rigid criminal control over the budgetary remains allocated for these purposes. The demagogy period has approached to a critical limit ... There is an immemorial question: What to do?!

As our practice (it is surveyed more than 18.000 children) shows, the direction "Ecological certification of the children's population" can become one of variants of the decision of the lifted problem at the given stage. In its basis three basic Programs lie: "Two stages of system of rehabilitation of vegetative infringements at children living in a zone of radiating control of Ukraine", "Functional biodiagnostics and correction of vegetative infringements at children" and "Is functional-ecological examination of regions of residing of the children's population". Thus it is necessary to mean expediency of its realization in school education system, differently in the location (residing) of the organized groups of the children's population (the professor M.Kuryk, the Ukrainian institute of ecology of the person).

And the last, on what it is necessary to pay attention:

1) the offered program provides monitoring of functional health in the organized groups of children, formation of groups of risk for professional detailed elaboration of its infringements and the further specific rehabilitation;

2) as the central link of functional health the vegetative homeostasis which infringement forms a pathogenetic basis of a functional pathology acts;

3) for an integrated estimation of functional health (vegetative balance) it is necessary to use methodology of clinical vegetative diagnostics which is recognized today in the Russian Federation by school of thought...

***Shared problems of clinical vegetative diagnostics.*** The problem of diagnostics of a functional condition of a vegetative homeostasis is especially actual today. From the point of view of the western theorists its regulation is provided with the integrated processes proceeding under control of vegetative nervous system (VNS). Its segmentary and peripheral devices depend on the central coordination and modulate influence on the highest levels, including a bark of the big hemispheres. Thus doesn't cause doubts that dynamic stability of a functional homeostasis is system dependent and is automatically corrected by oscillatory power information processes round the general steady state. Becomes clear that pathology development in biological systems which are natural generators of energy and its conductors breaks biophysical transformation of energy which causes a functional exhaustion of interdependent bodies and systems of a complete organism.

From the point of view of biophysics the homeostasis is a condition at which processes of information-power transformations are in dynamic balance, providing an organism a physiologic optimum and adaptation to ecologically dangerous environment. Differently dynamically stable vegetative homeostasis is a basis of functional (vegetative) health.

Representation about a homeostasis not absolutely legally is very frequent use for rather isolated processes. In the literature there are terms "immunological, electrolytic, system, molecular,

physical and chemical, genetic" and to that a similar homeostasis. At once we will pay attention that the last wrongfully localizes the diagnostic approaches reflecting separate mechanisms of vegetative regulation. Thus the majority of experts recognizes expediency of the integrated-system analysis which deduces researchers for frameworks of separate vegetative parameters and provides understanding of an organism, as difficult interdependent system.

Till today the standard method of an integrated estimation of a vegetative homeostasis there is a vegetative anamnesis with use of polling tables. The isolated estimation of sympathetic and parasympathetic reactions of base departments VNS that contradicts modern representation about the is functional-dependent organization is thus historically kept. Besides, complexity of studying over segmentary and segmentary levels of vegetative regulation limits the information necessary for clinical physicians. It is important to remember and heterogeneity of sympathetic and parasympathetic reactions, nonlinearity of parameters of the vegetative status at change of activity of one of departments VNS and their dependence on a number of regulating factors. Thus recognize (Vayn-2000; Nozdrachov-2003) that indicators of tool inspection VNS characterize only separate mechanisms of vegetative regulation ...

Thus, tabular methods of vegetative diagnostics are subjective, and tool reflect a functional condition of separate subsystems VNS and separate fragments of vegetative regulation. Therefore for overall picture creation numerous, simultaneous and labor-consuming researches at which separate indicators lose signs of a system estimation of the general vegetative homeostasis (VH) are necessary.

It is considered that in mechanism health preservation and the mechanism illness development any condition the leading part belongs to vegetative nervous system (VNS) which is responsible for processes of adaptation and support of an internal homeostasis. Therefore displays of vegetative dysfunction carry to most common symptoms in medical practice. In the affirmed opinion at research VNS it is important to define its functional condition which essence is made by an estimation of a vegetative tone, vegetative reactance and vegetative maintenance of processes of adaptation. Today to the above-stated it is necessary to add one more important addition: necessity of installation of an interdependent parity (balance) of functional (intersystem) activity ...

The doctrine about sympathetic activity and parasympathetic activity often criticize, meaning rare display of the specified syndromes in the pure state. Clinical physicians meet the mixed forms though recognize is more often that the principle of an estimation of vegetative infringements to separate vegetative signs all the same remains actual. A considerable quantity of various methods of estimation testifies to it segmentary and over segmentary departments VNS extremely.

The first group of means of a vegetative estimation concern.

**Researches of a vegetative tone (VT).** Under VT understand a stable condition of vegetative indicators in relative rest (differently relative equation of sympathetic and parasympathetic activity). Methods of research VT of a steel: 1) special polling tables; 2) tables of registration of objective vegetative indicators; 3) association of the first and second directions. Thus believe that integrated indicators display vegetative interdependence of systems. For an estimation of a vegetative tone use settlement indicators: a vegetative index of Kerdo; research of minute volume of blood Lile-Shtrander by the indirect way and Tsander; the analysis of variability of a warm rhythm - variation пульсометрию.

**Researches of vegetative reactance.** For its estimation use: 1) pharmacological tests (with

adrenaline, insulin, pilocarpinum, atropine and others ...); 2) physical activities and test by a cold; 3) pressure on zones with the raised reflex sensitivity (an is warm-eye reflex of Danini-Ashner, sin carotid reflex of Chermak-Gering, solar epigastria reflex of Toma-Ru and others).

**Means of research of vegetative maintenance of activity (VMA).** Indicators of VMA specify in adequacy of vegetative maintenance of behavioral reactions. In norm they correspond to the form, intensity and duration of action. For an estimation of VMA use experimental models: the dosed out physical activity, tests by position (a standing position and a prone position), intellectual loading (mathematical actions, drawing up of words), emotional loading (modeling of negative and positive emotions) and so forth.

**Additional means of an estimation of functional condition VNS.** Vegetative frustration (especially at cerebral level) are considered psycho vegetative that demands additional inspection of mental sphere. Studying concerns this group hormonal and Neuro-hormonal functions and electrophysiological researches on process localization. Thus the greatest distribution have received an electrocardiography (electrocardiogram) and skin -galvanic reflex (SGR).

As we see, the similar abundance of methodical approaches doesn't solve the questions put by life, and in clinic functional diagnostics of activity of vegetative nervous system concern with rather notable neglect ... Nevertheless a problem of integrated functional vegetative diagnostics demands the decision.

Well, there is time for everything, and we will pass to consideration to a forthcoming problem and we will pay attention to the following.

**Experimental base of opening it is functional - vegetative system of the person.** The direction recommended for introduction is proved more than sufficient base of supervision over dynamics of functional (vegetative) health of 14.304 children of different age and a floor (tab.1).

Table 1

Groups of surveyed children on age and a floor.

Groups of surveyed children on age and a floor.	Age advanced in years		quantity	
	female's	man's	female's	man's
Younger school (YG)	7-11 y.	7-12 y.	2.386	3.026
Teenage (TG)	12-15 y.	13-16 y.	3.165	2.613
Youthful (Yn.G)	16-20 y.	17-21 y.	2.629	129
Mature (NG)	21-50 y.	22-60 y.	240	95
The mixed age (MAG)	7-20 y.	7-21 y.	8.416	5.875
The mixed age and floor (MAFG)	7-21 y.		<b>14.304</b>	

Studying of base directions is carried out on the basis of author's методологий "Vegetative biodiagnostics (VBD) on V.Makats" and "Identification of vegetative dependence on the basis of VBD". Their performance has been provided by electronic devices of new generation "VITA-01-M" and "VITA-01-Diotest", using ability of biological systems to generate in the closed contour biogene energy (fig. 1 and. Method VBD and devices for its realization are officially resolved by Republican

Problem Commission Ministry of Health of Ukraine ("New iatrotechnics and new methods of diagnostics", reports №5 from 25.12.91; №1.08-01 from 11.01.94) and Academic council Ministry of Health of Ukraine (report №1.08-01 from 11.01.94). Type devices "VITA-01-M" don't demand periodic standardization as methodology VBD doesn't provide use of traditional external energy sources. Feature VBD also is definition not absolute, but relative indicators of bioelectric activity of representative FAZ of a skin.

Equipment for carrying out of vegetative biodiagnostics (on V.Makats).

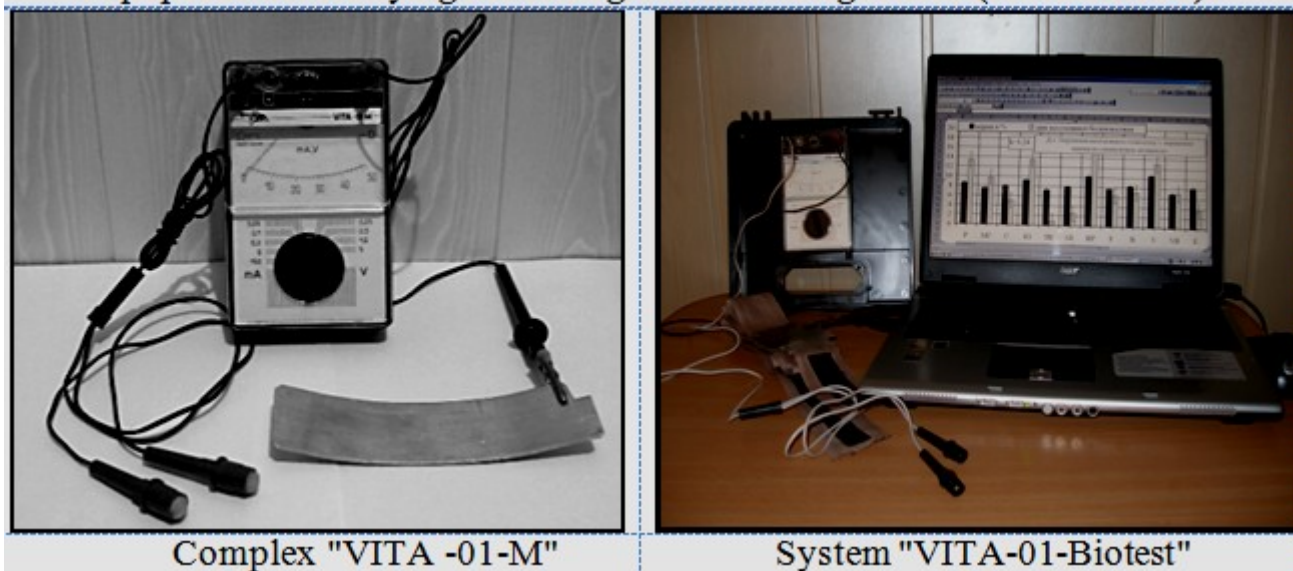


Fig. 1

For studying of methodological advantage VBD before officially recognized as "standard vegetative tests", in parallel carried out electric diagnostics on acupuncture points on Nakatani (Ryodoraku), Foll and Nechushkin (in updating of the Central scientific research institute of Traumatology and orthopedy Ministry of Health the USSR and the Moscow higher technical school of Bauman). The received results were compared with indicators of a cardiography of a warm rhythm on R.Baevsky, including: a vegetative index of Kerdo - BI, minute volume of blood - MO, an index of minute volume of blood - QVm, fashion definition - Mo, amplitudes of a fashion - AMo, and variation scope (BP or MxDMn). Secondary indicators variation пульсометрии in addition paid off: an index of vegetative balance (Q or IBP), vegetative parasympathetic scope - BPIP and a pressure index regulation systems – IH (about the revealed discrepancies we will speak in section «Vegetative biodiagnostics) ...

The statistical analysis of received results VBD is executed on the personal computer by means of the applied programs Microsoft Office 2000, the expanded release (Premium Edition), the Russian version, Statistica 5.0 for Windows. Behind normal distribution in samples of the same signs for their comparison used criterion of Student. In the absence of normal (Gaussian) distribution in untied samples of comparison spent by means of nonparametric criteria of Vald-Volfovits, the Manna-Uitni, Kolmogorov-Smirnova, Kraskella-Uollisa, and in the connected samples by means of criterion of signs on Vilkokson. Differences between compared sizes considered statistically authentic at significance value  $P < 0, 05$ .

Now about the most important in the developed direction ...



**METHODOLOGY OF IDENTIFICATION HYPOTHETICAL АКУПУНКТУРНЫХ CHANNELS  
AND SYSTEM-VEGETATIVE DEPENDENCE.**

This point in question has paramount value for directions "Vegetative Chzhen-tszju therapy" and "Functional biodiagnostics and correction of vegetative infringements at children", for the first time in medical practice have been identified (the biophysical reality) hypothetical acupuncture channels is proved!

As the proof in details enough to consider materials of repeated vegetative biodiagnostics (on V.Makats) the same person on an extent at least 10-14 days. Thus once again we pay attention that at the heart of the developed methodology the biophysical reality of the unknown person before is functional-vegetative system of the person which has appeared material resources of traditional East Chzhen-tszju of therapy lies, has confirmed its basic theoretical concepts and the direct relation to a vegetative homeostasis!

To begin with we will consider possibility of identification of system dependence in group any way chosen functional (acupuncture) channels on dynamics of bioelectric activity of their functionally active zones (we will in passing notice that today their biophysical reality in a scientific world doesn't cause doubts). So, as an example we will consider system dependence between channels "the Spleen-pancreas (SP-3), the Stomach (ST-42), Heart (HT-7), the Bladder (BL-64), the Threefold heater or lymphatic system (TE-4) and the Liver (LR-3)".

In the first variant of the analysis two situations (tab. 2a, fig. 2a) are presented.

Table 2

Identification of biophysical dependence of functional systems (FS) ST-HT-BL-TE-LR  
at chaotic and ordered (on increase) activity SP.

a) Indicators FS (ST-HT-BL-TE-LR)  
at chaotic (disorder) activity SP-3

SP	ST	HT	BL	TE	LR
4.42	-0.67	-0.57	2.94	-1.73	-0.49
8.42	-1.17	-1.07	5.74	-3.03	-1.09
-5.48	0.63	0.83	-2.66	1.87	0.41
-1.58	-0.07	0.33	-1.06	0.27	0.31
2.42	-0.37	-0.27	1.84	-1.13	-0.29
-4.48	0.03	0.83	-2.86	1.37	0.31
1.42	-0.37	-0.17	0.84	-0.83	-0.19
-8.98	-3.07	1.53	-2.46	0.37	-2.19
0.42	-0.07	-0.27	0.44	-0.53	0.11
7.42	-1.57	-0.97	5.64	-2.03	-1.09
-6.48	0.03	0.53	-2.76	1.57	0.41
5.42	-0.87	-0.47	3.94	-2.13	-0.59
3.42	-0.67	-0.17	2.24	-1.43	-0.39
-2.48	0.23	0.33	-1.56	0.47	0.41
-0.58	-0.07	0.03	-0.46	-0.23	0.11
3.42	-0.67	-0.17	2.24	-1.43	-0.39
-2.48	0.23	0.33	-1.56	0.47	0.41
-0.58	-0.07	0.03	-0.46	-0.23	0.11
6.42	-1.07	-1.07	4.84	-1.93	-0.29

b) Indicators FS (ST-HT-BL-TE-LR)  
at the ordered activity SP-3  
(on table materials 2a)

SP	ST	HT	BL	TE	LR
-8.98	-3.07	1.53	-2.46	0.37	-2.19
-7.48	-0.47	0.93	-2.86	2.77	-0.19
-6.48	0.03	0.53	-2.76	1.57	0.41
-5.48	0.63	0.83	-2.66	1.87	0.41
-4.48	0.03	0.83	-2.86	1.37	0.31
-3.48	0.03	0.63	-2.46	0.97	0.21
-2.48	0.23	0.33	-1.56	0.47	0.41
-1.58	-0.07	0.33	-1.06	0.27	0.31
-0.58	-0.07	0.03	-0.46	-0.23	0.11
0.42	-0.07	-0.27	0.44	-0.53	0.11
1.42	-0.37	-0.17	0.84	-0.83	-0.19
2.42	-0.37	-0.27	1.84	-1.13	-0.29
3.42	-0.67	-0.17	2.24	-1.43	-0.39
4.42	-0.67	-0.57	2.94	-1.73	-0.49
5.42	-0.87	-0.47	3.94	-2.13	-0.59
3.42	-0.67	-0.17	2.24	-1.43	-0.39
4.42	-0.67	-0.57	2.94	-1.73	-0.49
5.42	-0.87	-0.47	3.94	-2.13	-0.59
6.42	-1.07	-1.07	4.84	-1.93	-0.29

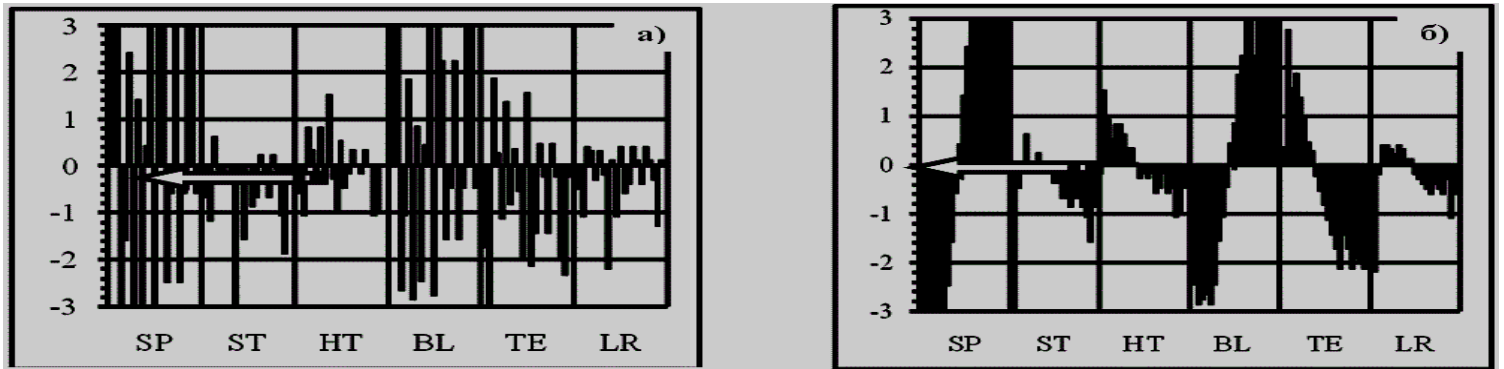


Fig. 2 Dependence of functional systems (ST-HT-BL-TE-LR) from activity of channel SP:  
 a) absence of evident dependence FS (ST-HT-BL-TE-LR) at the disorder (Chaotic) activity SP-3;  
 b) Identification of dependence FS (ST-HT-BL-TE-LR) At ordered (accruing) activity SP3  
 (on table materials 2a).

1) Attempt of identification of system dependence at chaotic (the disorder; in process of reception on separate days of supervision) an arrangement of values of activity of representative zone SP-3 and other indicators synchronously dependent on it (tab. 2a, fig. 2a). In this variant of attempt will identify biophysical system dependence on a condition of activity of channel SP are vain.

2) Possibility identification of system dependence at ordered (in process of excitation) an arrangement of values of activity of representative zone SP-3 (tab. 2-б, fig. 2-б).

In a case, (the vertical column of tab. 2-б and fig. 2-б) specifies increase of bioelectric activity of functional system SP in synchronously dependent dynamics of activity of other (dependent) functional systems (ST-HT-BL-TE-LR).

Table 3

Identification of system biophysical dependence SP-ST-HT-BL-LR from "ordered"  
 (on increase) activity of functional channels TE and BL

a) Indicators FS (SP-ST-HT-BL-LR) at the ordered activity TE-4 (on table materials 2a)					
SP	ST	HT	BL	TE	LR
5.42	-0.87	-0.47	3.94	-2.13	-0.59
5.42	-0.87	-0.47	3.94	-2.13	-0.59
5.42	-0.87	-0.47	3.94	-2.13	-0.59
7.42	-1.57	-0.97	5.64	-2.03	-1.09
6.42	-1.07	-1.07	4.84	-1.93	-0.29
4.42	-0.67	-0.57	2.94	-1.73	-0.49
4.42	-0.67	-0.57	2.94	-1.73	-0.49
3.42	-0.67	-0.17	2.24	-1.43	-0.39
3.42	-0.67	-0.17	2.24	-1.43	-0.39
2.42	-0.37	-0.27	1.84	-1.13	-0.29
1.42	-0.37	-0.17	0.84	-0.83	-0.19
0.42	-0.07	-0.27	0.44	-0.53	0.11
-0.58	-0.07	0.03	-0.46	-0.23	0.11
-1.58	-0.07	0.33	-1.06	0.27	0.31
-8.98	-3.07	1.53	-2.46	0.37	-2.19
-2.48	0.23	0.33	-1.56	0.47	0.41
-3.48	0.03	0.63	-2.46	0.97	0.21
-4.48	0.03	0.83	-2.86	1.37	0.31

b) Indicators FS (SP-ST-HT-TE-LR) at the ordered activity BL-64 (on table materials 2a)					
SP	ST	HT	BL	TE	LR
-4.48	0.03	0.83	-2.86	1.37	0.31
-7.48	-0.47	0.93	-2.86	2.77	-0.19
-6.48	0.03	0.53	-2.76	1.57	0.41
-5.48	0.63	0.83	-2.66	1.87	0.41
-8.98	-3.07	1.53	-2.46	0.37	-2.19
-3.48	0.03	0.63	-2.46	0.97	0.21
-2.48	0.23	0.33	-1.56	0.47	0.41
-1.58	-0.07	0.33	-1.06	0.27	0.31
-0.58	-0.07	0.03	-0.46	-0.23	0.11
0.42	-0.07	-0.27	0.44	-0.53	0.11
1.42	-0.37	-0.17	0.84	-0.83	-0.19
2.42	-0.37	-0.27	1.84	-1.13	-0.29
3.42	-0.67	-0.17	2.24	-1.43	-0.39
3.42	-0.67	-0.17	2.24	-1.43	-0.39
4.42	-0.67	-0.57	2.94	-1.73	-0.49
4.42	-0.67	-0.57	2.94	-1.73	-0.49
5.42	-0.87	-0.47	3.94	-2.13	-0.59
5.42	-0.87	-0.47	3.94	-2.13	-0.59

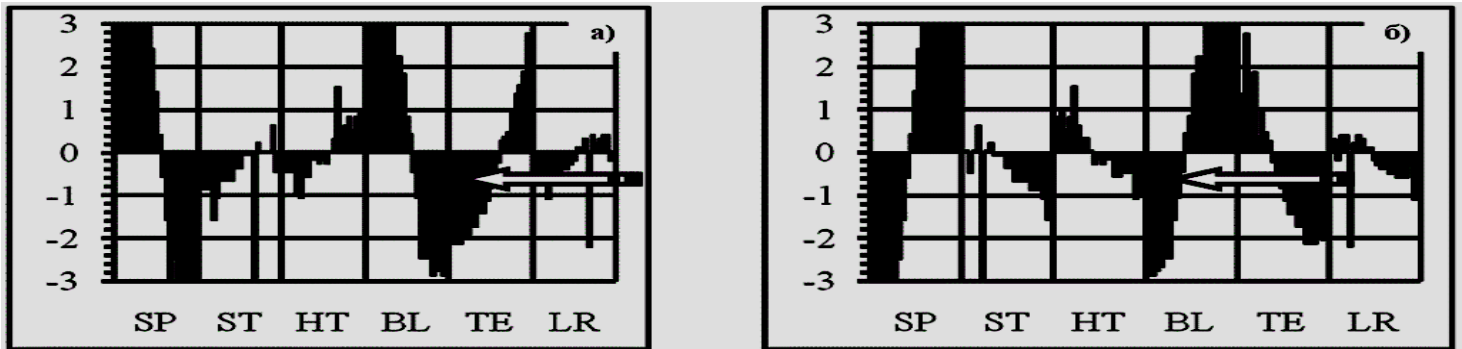


Fig. 3 Dependence of functional systems on activity TE and BL (on tab. materials 2a):  
 a) identification of dependence  $\Phi C$  SP-ST-HT-BL-LR at ordered activity TE-4;  
 b) identification of dependence  $\Phi C$  SP-ST-HT-TE-LR at ordered activity BL-64.

Using the similar methodological approach, on tab.2 materials we will consider system dependence at the activity of the functional channel ordered on excitation "the Threefold heater - TE" (tab. 3, fig. 3) and "the Bladder - BL" (tab. 3-б, fig. 3-б). Thus again we will pay attention to display of their synchronously dependent activity! And once again, using the similar methodological approach, races-look real biophysical dependence at the analysis of the ordered excitation of functional systems "Heart-HT" (tab. 4, fig. 4) and "the Stomach-ST" (tab. 4-б, fig. 4-б).

Table 4

Identification of biophysical dependence SP-ST-HT-BL-TE-LR from "ordered" (on increase) activity акупунктурных channels "HT" and "ST".

a) Indicators FS (SP-ST-BL-TE-LR) at the ordered activity HT-7 (on table materials 2a)

SP	ST	HT	BL	TE	LR
8.42	-1.17	-1.07	5.74	-3.03	-1.09
6.42	-1.07	-1.07	4.84	-1.93	-0.29
7.42	-1.57	-0.97	5.64	-2.03	-1.09
9.42	-1.87	-0.97	5.44	-2.33	-1.29
4.42	-0.67	-0.57	2.94	-1.73	-0.49
5.42	-0.87	-0.47	3.94	-2.13	-0.59
2.42	-0.37	-0.27	1.84	-1.13	-0.29
0.42	-0.07	-0.27	0.44	-0.53	0.11
1.42	-0.37	-0.17	0.84	-0.83	-0.19
3.42	-0.67	-0.17	2.24	-1.43	-0.39
3.42	-0.67	-0.17	2.24	-1.43	-0.39
-0.58	-0.07	0.03	-0.46	-0.23	0.11
-0.58	-0.07	0.03	-0.46	-0.23	0.11
-0.58	-0.07	0.03	-0.46	-0.23	0.11
-1.58	-0.07	0.33	-1.06	0.27	0.31
-2.48	0.23	0.33	-1.56	0.47	0.41
-2.48	0.23	0.33	-1.56	0.47	0.41
-6.48	0.03	0.53	-2.76	1.57	0.41

b) Indicators FS (SP-HT-BL-TE-LR) at the ordered activity ST-42 (on table materials 2a)

SP	ST	HT	BL	TE	LR
9.42	-1.87	-0.97	5.44	-2.33	-1.29
7.42	-1.57	-0.97	5.64	-2.03	-1.09
8.42	-1.17	-1.07	5.74	-3.03	-1.09
6.42	-1.07	-1.07	4.84	-1.93	-0.29
5.42	-0.87	-0.47	3.94	-2.13	-0.59
4.42	-0.67	-0.57	2.94	-1.73	-0.49
3.42	-0.67	-0.17	2.24	-1.43	-0.39
3.42	-0.67	-0.17	2.24	-1.43	-0.39
2.42	-0.37	-0.27	1.84	-1.13	-0.29
1.42	-0.37	-0.17	0.84	-0.83	-0.19
0.42	-0.07	-0.27	0.44	-0.53	0.11
-0.58	-0.07	0.03	-0.46	-0.23	0.11
-0.58	-0.07	0.03	-0.46	-0.23	0.11
-0.58	-0.07	0.03	-0.46	-0.23	0.11
-1.58	-0.07	0.33	-1.06	0.27	0.31
-6.48	0.03	0.53	-2.76	1.57	0.41
-2.48	0.23	0.33	-1.56	0.47	0.41
-2.48	0.23	0.33	-1.56	0.47	0.41

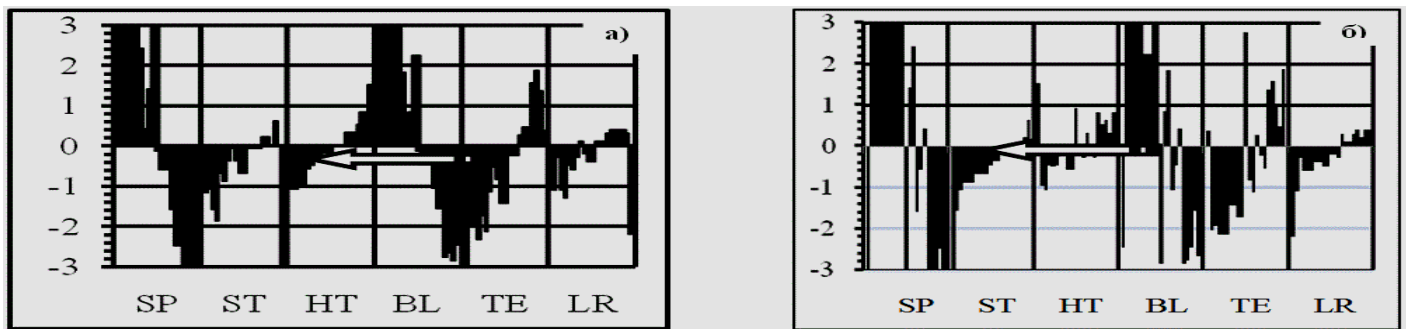


Fig. 4. Dependence of functional systems on activity HT and ST (on table materials 2a):  
 a) identification of dependence  $\Phi C$  SP-ST-BL-TE-LR at ordered activity HT-7;  
 b) identification of dependence  $\Phi C$  SP-HT-BL-TE-LR at the ordered Activity ST-42.

The analysis of the received results is unequivocal: the offered methodology of identification hypothetical acupuncture channels for 5000-year-old history of Chzhen-tszju of therapy has allowed revealing and confirming for the first time their biophysical reality. Thousand-year dispute between east and western therapeutic philosophies is finished. Use of the developed methodology has given the chance to reveal phenomena of system functional dependence, from-cover the unknown person earlier FVS, to prove the direct relation of Chzhen-tszju of therapy to a vegetative homeostasis and to spend biophysical audit of base positions of traditional Chinese medicine (TM).

Further on the basis of the analysis of the original biophysical data pathogenetic mechanisms of functional vegetative infringements and a way of their information correction became clear. Became obvious that use of our workings out allows the western experts to see signs of vegetative frustration at early stages of functional development, and not just to fix clinical signs of destructive consequences of pathological process.

As an example of identification of system functional dependence we result reaction FS PC-HT-ST-KI-DB-LR-SP-BL-LI-TE-SI to increasing activity of channel "LU-easy" (fig. 5)

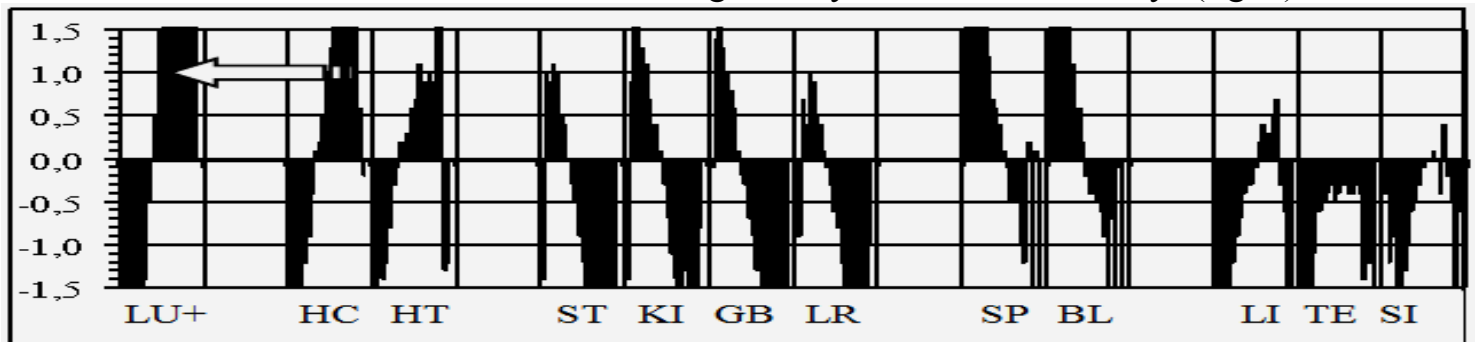


Fig. 5 Identification of dependence FS PC-HT-ST-KI-DB-LR-SP-BL-LI-TE-SI from accruing Activity of the channel of acupuncture "LU – lungs".

Differently today there are all bases to assert that bases TCM which have reached our time biophysical Reality, can become a scientific basis of modern pathogenetic therapy in pediatrics and help to realize an essence of power information processes in biological systems.

If we understand the general laws of vegetative power information transformations, to us there are more clear universal laws of the Nature, a way and ways of their control and management.

And one more important, in our opinion, the moment to which it is necessary to pay attention of pediatricists and other practicing experts. Without denying value vegetative (sympathetic and parasympathetic) regulation of functional activity of biological systems, doctors practically doesn't use it in clinical practice. Thus reasoning's about pathogenetic and etiology value of the western chemo-

therapy, unfortunately, are rather conditional today, have under itself no real substantiation and are far from prospect ... But let's return to this question after acquaintance with base positions of the developed direction the complex information about which the group of authors has informed for the first time in 2000 ...

And now it is necessary to familiarize with base terminology traditional Chinese Chzhen-tszju of therapy whom we will use at the information on the unknown person before a reality - Is functional-vegetative system of the person. We represent it in a format professor A.Vasilenko (Russian Federation) who on the basis of the international nomenclature has most seriously worked a question of terminological maintenance of our problem. And though its many positions are subject today to critical judgement, with them it is necessary to be considered, for the new biophysical reality yet hasn't received the deserved attention.

So, as a result of the seven-year (1982–1989) consultations the international commission of experts working under aegis the CART, is accepted the International nomenclature of acupuncture (INA). Structural basis INA is made by three basic elements:

- 1) english translation of the Chinese name acupuncture the channel or a point;
- 2) the alphabetic and digital code in which the alphabetic part represents an abbreviation of the English name acupuncture the channel, and digital corresponds to the accepted numbering of points;
- 3) an English phonetic transcription of the Chinese names acupuncture channels and points.

In tab. 1 and 2 recommendations INA concerning 14 ordinary (the main things, classical) and 8 extraordinary (wonderful) channels according to addition of Russian phonetic transcription of their Chinese names are resulted.

One of questions of principle concerns hypothetical "acupuncture channels". According to experts INA a word "channel" (English vessel) reflects essence of the base concept about circulation of energy of Chi in an organism more adequately. Owing to existing western misunderstanding of this phenomenon, in an acupuncture lexicon there was a term "meridian". The meridian designated conditional (not real) a line which is an element of system of coordinates.

However, following recommendations MAH and requirements of unification of the terms framework, the use of the term "channel" became preferable.

Table 5.

#### Ordinary (the main things, classical) acupuncture channels

№	Name (the Russian)	A phonetic transcription <sup>1,2</sup>	Name (the English)	Code
I	Лёгкие	Show-thaj-yin-fej	Lung	LU
II	Толстый кишечник	Show-jan-min-da-chan	Large intestine	LI
III	Желудок	Tszu-jan-min-vej	Stomach	ST
IV	Селезёнка	Tszu-thaj-yin-pi	Spleen	SP
V	Сердце	Show-shao-yin-sin	Heart	HT
VI	Тонкий кишечник	Show-thaj-jan-sjao-chan	Small intestine	SI
VII	Мочевой пузырь	Tszu-thaj-jan-pan-guan	Bladder	BL
VIII	Почки	Tszu-shao-yin-shen	Kidney	KI
IX	Перикард	Show-tszjue-yin-sin-bao	Pericardium	PC
X	Тройной обогреватель	Show-shao-jan-san-tszjao	Triple energiser	TE
XI	Желчный пузырь	Tszu-shao-jan-dan	Gall bladder	GB
XII	Печень	Tszu-tszjue-yin-gan	Liver	LR
XIII	Управляющий канал	Du-May (back)	Governor v. <sup>3</sup>	GV
XIV	Зачатия канал	Zhen-May (forward)	Conception v.	CV

Notes: 1- to a phonetic transcription of each ordinary channel as a final syllable the word "jing" - the channel is added; 2- a Variety of the European variants of the Chinese transcription causes logicity of recommendations INA about their identification in English. 3- reduced from English «vessel» (channel).

Table 2.

## Extraordinary (wonderful) channels of acupuncture

№	Name (the Russian)	A phonetic transcription <sup>1,2</sup>	Name (the English)	Code
1	The operating channel	Du- maj	Governor v.	GV
2	The conception channel	Zhen- maj	Conception v.	CV
3	The rising	Chzhun- maj	Thoroughfare v.	TV
4	The surrounding	Daj- maj	Belt v.	BV
5	The internal calcaneal	Yin- tszjao- maj	Yin* heel v.	Yin HV
6	The external calcaneal	Jan- tszjao- maj	Yang* heel v.	Yang HV
7	The internal supporting	Yin- vej- maj	Yin link v.	Yin LV
8	The external supporting	Jan- vej- maj	Yang link v.	Yang LV

Thus, numbers of channel points are put after a code of the channel without a hyphen and the admission (for example, LI4, ST36).

Proceeding from topographical localization of some FAZ more than on 0,5 sm from channel, it is allocated 48 out of channel points (EX). Depending on their localization after a designation "EX" through a hyphen the code of area of a body follows: HN - a head and a neck; CA - a breast and a stomach; B - a back; UE - the top extremities; LE - the bottom extremities. Out of channel points are numbered: from top to down on a head, a neck and a trunk; from proximal to distal departments on extremities; with medial to the lateral party if they are located at one level.

In the field of a head and a neck (EX-HN) 15 points, a breast and stomach (EX-CA) - one point under the name "tszy-gun", backs (EX-B) - 9 points, on the top and bottom extremities - on 11 and - 12 out of channel points of acupuncture, accordingly are allocated. Recently the modern reflexotherapy allocates microsystems for functional influence in the field of a scalp (MS), an auricle (MA), iris eyes, brushes and feet (Sou-dzhok), a nose, an oral cavity, language, a vagina and other areas (it is not necessary to speak about a scientific substantiation of the specified workings out...).

Thus, in acupuncture microsystems by a holographic principle allocate smaller systems ... Thank God that in INA two of them are included while only: a scalp and auricle (*the note of the author*)!

### Conclusions.

1. The original methodology which allows identifying channels of traditional Chzhen-tszju of therapy and their system dependence is created.
2. The developed direction opens biophysical mechanisms of development of vegetative infringements at children and specifies in system of their pathogenetic control.

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