## "Express-diagnostics of disadaptation syndrome by the "rofes-diagnostics" method" (methodic recommendations for doctors, psychologists, valeologists)

Edition 3.

# Department of Health in Sverdlovsk Region Ural State Medical Academy Ural State Pedagogical University Sverdlovsk regional clinic psychoneurological hospital for war veterans

Regional hospital No.2 – Regional centre for radiation medicine Regional centre for military personnel in reserve's social adaptation "Altaim" Ural research and production enterprise

«APPROVED»

Head of Health Department
Sverdlovsk region
R. Halfin

2 April 1998

#### **Reviewers:**

Corresponding Member of Russian Natural Sciences Academy, Professor, Doctor of medical sciences, I. Oransky

The head of psychiatry department at Ural State Medical Academy, Professor, Doctor of medical sciences, B. Trifonov

Professor of ecology and ecological education department at Ural State Pedagogical University, K. Silantyeva

Assistant professor at psychology department, pedagogics department at Ural State Medical Academy, T. Rogacheva

<u>Consultant</u> – The head of psychoneurological hospital for war veterans, Honoured doctor, S. Spector.

## "Express-diagnostics of disadaptation syndrome by the "rofes-diagnostics" method"

(methodic recommendations for doctors, psychologists, valeologists)

Edition 3.

Information about authors:

- G.V. Talalayeva doctor of medical sciences, member of Russian Natural Sciences Academy, member of Russian Nuclear Society, the head of scientific research and application department at Regional centre for radiation medicine.
- I.G. Lavrik the head children's dermatologist of Ekaterinburg. Development of criteria for the "ROFES" set express-diagnostocs' clinic results.
- A.I. Kornyukhin psychologist, director of "Altaim" Ural research and production enterprise. One of the creators of the "ROFES-method". Developed criteria for "ROFES" electropuncture testing's results' psychological interpretation.
  - © Authors 1998 г.
  - © Authors 2001 г.
  - © Authors 2003 г.

Ekaterinburg 2003

#### ANNOTATION

The express-diagnostics method with the "ROFES" (recorder of function and emotional state assessment) set of hardware and software electropuncture diagnostics offered in this book is aimed at detection of deadaptation syndrome and allows a complex assessment of the degree of strain on adaptation processes, a quantitative and qualitative assessment of adaptation irregularities, and to interpret the nature of changes detected in terms of clinic medicine and psychology.

The described below recommendations can be used by doctors of different specialities, psychologists, valeologists.

This express-diagnostics can be used in hospitals, polyclinics, rehabilitation centres, health centres and preventoriums, and also by family doctors and reflexotherapists.

Besides, it can be used at educational institutions in order to objectify the influence of educational process upon the students' psychophysiological state.

Quick and informative results of the "rofes-diagnostics" method allow using it in mass research.

With its help psychological services of enterprises can:

- diagnose workers' function and emotional state in order to detect the degree of their nervous tension, to prevent psychological breakdowns, to detect the degree of risk before fulfilling an important task (access control);
- assess the inborn psychophysiological abilities and obtain conclusion about professional propriety to work connected with stress, risk, high responsibility (access control);
- determine psychological compatibility in groups (sport, professional), teams;
- determine with screening diagnostics people prone to asocial behaviour (suicide, drug-addiction) and those who need medical and psychological help.

For health care system this method has also great potential because it creates prerequisites and information and software background for new trend in medicine – **telemedicine**, i.e. with the help of modern communication means create a distant service of medical and psychological help and make medical and psychological diagnostics and consulting closer to patients who need it.

The psychophysiological state express-diagnostics method offered here is an integral assessment of the patient's adaptability: it includes combined patophysiological characteristics and preliminary clinical diagnosis, gives a description of somatic state and psychoemotional component.

#### 1. General regulations.

Modern western views on energy supply of body's functioning as a living system is in general represented by the theory of calorie nutrition. Living body is presented in the form of one "energy furnace" where the fuel is food and oxygen processed by the body and the energy evolved supports its vitality.

Eastern and philosophical approach to the views on body's functioning as a living system is based on energy structure of a body in the form of energy centres which process the incoming energy, control and distribute it through the body. These energy centres are called "Chacras".

Accordingly, the energy processed in these energy centres- chacras needs to be delivered to all body's organs and systems. Consequently, there do exist some canals through which the energy will be transported from chacras. In eastern ideas, these energy canals are the system of meridians that span the whole body and outcrop in the form of acupuncture points. "Being the third regulatory system (after the nervous and humoral ones) chacras and meridians are not material formations consisting of molecules as ordinary organs of our body. They are formed by invisible fields that have solenoidal character. Even the word "chacra" itself translated from Sanscrit means "wheel, rotation" and chacra's shape resembles tornado's swirl, a cone located in the horizontal plane. Also, its foundation lies on the body's surface and its peak — on the backbone". ["Psychosomatic diseases in healer's practice. Recommendations for patients" L.I. Lebedev, Candidate of medical sciences, 1997]

Energy centres' hierarchical structure is made so that each higher centre controls the inferior ones and the functioning of inferior centres influences higher centres (more detailed information can be printed out from the ROFES software – Reference System or found in special literature).

1 centre	ROOT CHACRA - MULADHARA	Main colour: red-orange Responsible for body's physical state Projective zones: Shoulder joint and hip joints
2 centre	SWADHISTANA - SACRAL	Main colour: orange Responsible for sexual energy and volitional impulse Projective zones: Elbow and knee-joints
3 centre	MANIPURA	Main colour: yellow Responsible for social stability and, as a result, social emotions, i.e. comfortable or uncomfortable state depending on relationships with social environment. Projective zones: Wrist and ankle joint
4 centre	ANAHATA - CORDIAL	Main colour: green Responsible for emotional features of character Projective zones:

		Joints of hands' and feet' first phalanxes			
5	VISHUDDHA - THROATY	Main colour: blue			
centre		Responsible for person's creative abilities			
		Projective zones:			
		Joints of hands' and feet' middle phalanxes			
6	AJNA	Main colour: indigo-blue			
centre		Responsible for person's intuitive and mental abilities			
		Projective zones:			
		Joints of hands' and feet' end phalanxes			
7	SAHASRARA	Main colour: violet			
centre		Responsible for connection with "space energy"			
		Projective zones:			
		Finger-tips and toe-tips			

#### ACUPUNCTURE and the "U-sin" conception in eastern phylosophy

Morphological confirmation of the body's meridian structure existence is discovered by classical western medicine specialists its beginnings is theoretically proven. "... The skin and nervous system have common ectodermal origin. The connection of internal organs and nervous system and via it with the skin is provided by nervous system's parts' growing into developing organs (R. Fuye, 1956)." As the fetus grows and develops these connections turn from "the points of touch" into "the canals of connection" the functioning of which is provided by inter- and intraorganic interaction, the development of blood and lymphatic vessels with their nerve plexus. According to R. Fuye's opinion, ancient western doctors called these "ways" "life lines". Apart from the evident connection of biologically active points (BAP) with the nerve conductors their morphofunctional specificity is proven: the existence of friable connective tissue, a dense net of nerve-endings, agglomeration of mast cells, particular biophysical characteristics (electroconductivity, tension, temperature) etc.

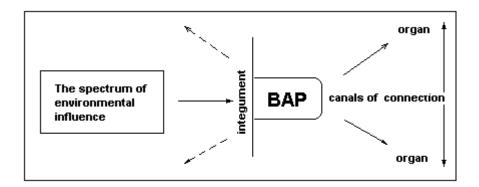


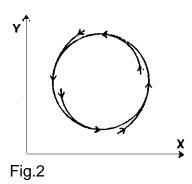
Fig. 1

Thus, biologically active points are kind of neuroreceptor organs and related with them cell humoral ones which are situated at different depth in the integument for different points and they are projected to the skin in the form of microzones and play the role of "windows" to the outside world. In general the main function of the "integument – canals of connection - organs" system is maintaining homeostasis (Professor V.G. Vorgalik, professor M.V. Vorgalik. The Natural Sciences Academy of Russian Federation. Institute of clinical patophysiology, immunology and development of new diagnostics and therapy methods).

The above mentioned proof of body's meridional structure's morphoanatomical characteristics remains the issue of how the environment's energoinformational influence upon biologically active points is transferred almost instantly to organs and systems controlled by meridians open. The whole spectrum of environmental influence is often in the subthreshold perception for the nervous system which is one of the components of the meridional structure.

The answer to this question and at the same time one more ponderable confirmation of the meridian system's existence is given by research conducted in the sphere of quantum physics when studying living systems [S.P. Sitko, L.N. Mkrtchyan "Introduction into quantum medicine" MSRC "VIDGUK", 1994].

A living organism, from the physicists' point of view, is a quantum mechanical object possessing energy potential (in the technical terms of physics – "marginal cycle" – a circle in the phase plane, a sphere in the three-dimensional space) consisting of coherent waves of collective nature. That is, this is the potential attracting the trajectories of both external and internal coherent waves (Fig.2). In biological systems coherent waves explain electromagnetic waves' superconductivity in the mediums impenetrable for them, such as living organisms' biochemical mediums [H. Frelich, 1988]



Consequently, the body's meridian system with relation to quantum physics is the union of running coherent waves that form living quantum mechanical object's energy potential.

In 1980, according to the WHO's resolution acupuncture is recognised as scientifically grounded method and recommended for medical practice.

According to the ancient eastern medicine, the human body has several "frames": bone, muscular, nervous, circulatory and energy ones. The main "frames" functioning, except the energy one, is described in detail in the works of the European school doctors.

The notion of the energy "frame" in eastern medicine meant a system of meridians (energy canals) that run through the whole human body and conduct energy coming out of the main energy centres known in Indian Yoga as chacras.

Meridian system is responsible for both energy nourishment of physical organs and control over their state. Many effects and reactions of a body are explained by the meridian system functioning and by its external and internal connections. According to eastern sources, there are 71 main and additional meridians in the meridian system. We are interested in the 12 main ones. All the changes happening to a human body and its functioning influence the meridians' state.

The acupuncture points act as connecting centres between the canals and the outside world and also among the canals. Influencing the acupuncture points it is possible to correct the meridian system abnormalities. The activity of meridians and body's organs and systems connected with them is determined by these points' physical parameters. The canals' power protects body's external and internal integument. When this power is damaged the disease penetrates the organs through meridians. Out of the canals structure which covers the whole body we are mostly interested in the main meridians carrying the energy for nutrition and controlling all the functions of the internal. All the main meridians have the names of so called "main organs" and control their state. They correspond to the organs' names in classic medicine:

Meridians of:

Lungs

Large intestine

Stomach

Pancreas – spleen

**Heart** 

Small intestines

Urinary bladder

Kidneys

Gall-bladder

Liver

<u>Pericardium</u>

And one conventional name – the meridian of "three heaters"

But although the ideas about the inner in Chinese medicine correspond to the ones in western medicine, in the East physiological functions and psychoemotional characteristics responsible for each organ are included additionally.

Meridians, the same as the space around us, in eastern philosophy are divided into Ying and Yan and hence they function according to the Ying-Yan rules of the existence of the Universe.

The Ying meridians accumulate energy, i.e. they are responsible for the person's **energy potential.** Among these are the following meridians:

Lungs

Pancreas – spleen

<u>Heart</u>

<u>Kidneys</u>

Liver

Pericardium

The Yang meridians are responsible for transferring the energy accumulated by the Ying meridians, i.e. their function **is energy potential realisation.** Among these are the following meridians:

<u>Stomach</u>

**Small intestines** 

Urinary bladder

Gall-bladder

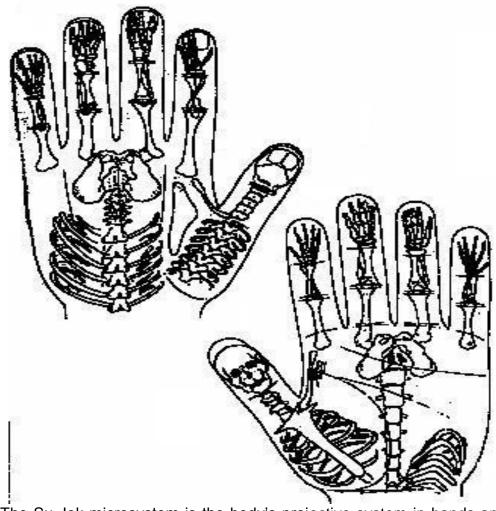
Large intestine

"three heaters"

#### Short description of meridians and their functions

#### The Su Jok microsystem

Fig. 3



The Su Jok microsystem is the body's projective system in hands and feet (see the Figure 3).

In the "rofes-diagnostics" method the projections of 12 pair meridians of hands and feet are used for body's state and psychological characteristics diagnostics.

The points diagnosed in the Su Jok microsystem are the projection of the points diagnosed in the corporeal method.

## The main rules of the meridian system energy functioning according to the U-sin conception

There are several rules according to which the body's meridian system functions, following the "U-sin" conception in eastern philosophy.

<u>The "5 first elements" rule.</u> The ancient Chinese philosophers noticed that all phenomena in the world are cyclical and it is connected with the interconversion of the five first elements:

- Tree
- Fire
- Soil
- Metal
- Water

The interconnections of the elements are shown in the pentagram and depend on internal and external impact and the course of time. Chinese doctors combined this theory with the meridian system.

<u>Each element (except fire) combines two meridians of the opposite cathegories</u> (Ying and Yan):

- Tree liver and gall-bladder meridians
- Soil pancreas spleen and stomach
- Metal lungs and large intestine
- Fire combines four meridians heart and small intestines, pericardium and "three heaters".

Within this rule there appear interchangeable connections between the elements, like in a Ying-Yan pair. When the energy of one meridian increases, it decreases in the other one.

<u>The "mother-son" rule.</u> The elements that form the pentagram are exposed to interference showed in the "mother-son" and "son-mother" rules. According to the "mother-son" rule each element is the source of energy for the next one. It kind of becomes "mother" and gives its energy to its "son". This rule is of constructive nature and can be written in the following way:

- "tree" generates "fire"
- "fire" generated ashes "soil"
- "soil" turns into "metal"
- "metal" melts and gives "water"
- "water" feeds the roots of "tree"

The "son-mother" reflects inhibitory influence of the elements. "Son" takes energy from "mother" and exhausts her. Both rules are widely used in acupuncture in order to cause exciting or sedative reaction.

<u>The "husband-wife" rule.</u> All the elements are joined with distructive connections. This rule can be describe in the following way:

- "fire" melts "metal"
- "metal" cuts "tree"
- "tree" digs "soil" with its roots
- "water" extinguished "fire"

Using this rule in treatment gives sedative effect.

Connections of meridians according to the "husband-wife" rule:

- lungs --- heart
- small intestines --- large intestine
- pancreas-spleen --- liver
- stomach --- gall-bladder
- pericardium --- kidneys

• three heaters --- urinary bladder

When analysing the measurements results the above mentioned rules help determine the reason of the disease and choose the tactics of treatment.

The "noon-midnight" rule. Each meridian has certain periods of diurnal activity:

- meridian of lungs from 3 to 5 a.m.;
- large intestine 5 7 a.m.;
- stomach 7 9 a.m.;
- pancreas-spleen 9 11 a.m.;
- heart 11 a.m. 1 p.m.;
- small intestines 1 3 p.m.;
- urinary bladder 3 5 p.m.;
- kidneys 5 7 p.m.;
- pericardium 7 9 p.m.;
- three heaters 9 11 p.m.;
- gall-bladder 11 p.m. 1 a.m.;
- liver − 1 − 3 a.m.

The counting starts from the meridian of lungs because in the opinion of Chinese doctors the daily cycle (circadian) of the energy circulation in the meridian system begins in the lungs. The time of activity is pointed in the period of equinox. In winter the period of day meridians functioning decreases and for night meridians it increases. In summer the reverse situation occurs. Meridians which period of activity differs for twelve hours are in contrast-conjugated relations. For example, the canal of lungs (3-5 a.m.) and urinary bladder (3-5 p.m.). This interconnection confirms the "noon-midnight" rule.

In the "ROFES" software the graphic representation of the body's meridian system' bioresonance characteristics' data obtained is provided. And these data strictly correspond to the U-sin conception about meridian system's Yin-Yang structure and to the above mentioned rules. These diagrams are called "Diagrams of body's meridian structure energy filling".

#### Methods of hardware acupuncture reflexodiagnostics

Nowadays in electropuncture diagnostics there are several relatively independent methods that differ by points examined, working parameters of the measuring devices and the analysis system of data obtained. Each method has its advantages and disadvantages and is applied depending on specific purpose. Among these methods are the Voll method, the Nakatani method and auriculodiagnostics.

We use methods similar to the Japanese scientist Nakatani's method that uses topology of measured biologically active points. This method is based on the theory Riodoraku developed by Nakatani. According to this theory there exists a close connection between the inner organs' functional state and electrical conductivity of the skin points situated on the lines of corresponding meridians. Nakatani called

these lines, which change their conductivity when the functioning of the corresponding organs changes, Riodoraku and divided them into two groups of six points in each one: on hands and feet.

The way of body's state assessment according to Nakatani method in general is the following: on each Riodoraku the measurement of electroconductivity at a certain point is taken. The value of this point shows the average value of the whole meridian's conductivity.

### The principle of the rofes-diagnostics method Corporeal and Su Jok method

In order to visualise the picture of functional state, to analyse the inner processes in dynamics and the environment impact upon human body the software builds a circle diagram. In this diagram the results of bioresonance reaction for every measured meridian to the microcurrents' sounding impact and also frequency characterisctics are recorded. Bipolar measurement of the biologically active points' reaction, mathematical processing of amplitude currents oscillation in the floating time interval increased self-descriptiveness of data obtained when examining the patient, in contrast to the traditional Nakatani method and, consequently, diagnosis reliability.

The minimum of time needed for the process of measurement (3-5 minutes) allows to compete with the Voll method (time of measurement – from 30 up to 50 minutes) which is known for its high clinical reliability of the results. Besides, other

VB 24 CI 6 E 8 8 RP 10 10 CC 18 TC 12 TC

methods do not have innovations concerning patient's psychological characteristics on the basis of electropuncture diagnostics.

Circle diagram includes 12 main pair meridians, each sector corresponds to one meridian. The left ray of the sector corresponds to the meridian's left branch, right ray – to the right branch. Consequently, in the diagram there are 24 values of BAP skin electoconductivity. In acupuncture relexodiagnostics they are called "points - assistants" or representative ones and they reflect the reaction of direct and reverse polarity current's sounding impact in the floating time and amplitude interval to the body's main 12 pair meridians. The value of BAPs skin electroconductivity are shown in standard units.

In the Su Jok method the bell-meridians which are the body's main pair meridians projections to hands and feet are considered in analysis. Points measured by the Su Jok method are the projection of points measured by the corporeal method.

From 0 – the centre of the diagram, to 100 – the diagram's edge.

In the "rofes-diagnostics" the following electric parameters are used:

Voltage 4 V. Current strength – 30: 60: 120 mcA

60 mcA current sounds LO-line canal and reflects functional abnormalities and psychoemotional components (for this mode all body's integral characteristics are calculated).

If a patient has chronic pathology or the canal is blocked, the following dissociation is possible:

Energy shortage in LO-line meridian with simultaneous energy surplus in the main canal, or vice versa. It is very important for reflexotherapists and physiotherapists to take this into account when conducting energy correction!!

All the acupuncture points used in corporeal method diagnostics are situated on the level of the 3<sup>rd</sup> chacra's projective zone. Consequently, the diagnostics results will reflect the personality's emotional components and those physical abnormalities that can be caused by the negative emotional background.

All the acupuncture points used in the Su Jok diagnostics method (Hand – Feet microsystem) are situated on the level of 5<sup>th</sup> and 6<sup>th</sup> chacras' projective zones, i.e. they reflect deep mental structures of a person, his or her attitude to world. Accordingly, physical abnormalities revealed with the Su Jok method will show predisposition to this or that disease which can be not yet revealed on the organ level and so these diseases will be prognostic in ontogenesis or they are the prime cause for the existing diseases. The disfigured vision of the world can also be the prime cause for a disease.

The connection of the body' structures' hierarchical levels is the following: physiological structures – psychological functions. You can find more information about it in the "Rofes-diagnostics psychological aspects" section.

#### The "Rofes-diagnostics" terminology

The <u>grid – pattern</u> on which the BAP electrochemical conductivity profile will be drawn after the measurements taken with the device is called the DIAGRAM.

In general the diagram with the BAPs electrochemical conductivity when sounding them with the direct and reverse polarity current drawn on it is called "ROFOGRAM".

The diagram's twelve sectors corresponding to the 12 pair meridians are named with Latin letters according to the internationally accepted standards.

(conventional - French) (Su Jok)

P - lungs meridian	А
GI - large intestine meridian	В
E - stomach meridian	С
RP – pancreas meridian	D
C - heart meridian	E
IG - small intestines meridian	F
V - urinary bladder meridian	G
R - kidneys meridian	Н
MC - pericardium meridian	]
TR - three heaters meridian	J
VB - gall-bladder meridian	K
F - liver meridian	L

Latin letters pointing the meridian's name are situated above the sector's left ray, i.e. <u>above the meridian's left branch</u>. The right ray – <u>meridian's right branch</u> is not named on the diagram. However, in the rofogram interpretation near the Latin letter of the meridian's name its belonging to thr right or left branch is noted in brackets. (s) means left branch, (d) – right branch.

#### For example:

P(s) is the left branch of the lungs meridian; P(d) is the right branch of the lungs meridian.

Electrochemical conductivity profiles are the measured values of BAPs reaction to the sounding impact of the direct and reverse polarity current drawn on the diagram sectors rays, i.e. on the meridians branches and joined together.

According to the conventional terminology they are called:

"energetics lines" – the points' electrochemical conductivity (ECC) profile when sounding them with the direct polarity current. On the rofogram it is marked with red colour and in the rofogram interpretation the meridian name is marked with small Latin letter, e.g. p(s).

"physiology lines" - the points' electrochemical conductivity (ECC) profile when sounding them with the reverse polarity current. On the rofogram it is marked with blue colour and in the rofogram interpretation the meridian name is marked with large Latin letter, e.g. P(s).

The sum of all values of the points' ECC when sounding them with the direct polarity current, i.e. all energetics lines, divided by 24, i.e. the quantity of all meridians, is the AVERAGE of energetics lines. On the rofogram it is marked with the red dashed line. In the rofogram interpretation it is marked as "e".

The sum of all values of the points' ECC when sounding them with the reverse polarity current, i.e. all physiology lines, divided by 24, i.e. the quantity of all meridians, is the **AVERAGE of physiology lines**. On the rofogram it is marked with the blue dashed line. In the rofogram interpretation it is marked as "f".

## Criteria of Meridian Branches Divergence in Per Cent from the Average Lines:

All the values of the points' ECC when sounding them with the direct and reverse polarity current, i.e. the energetics and physiology lines, which are situated <u>closer to the centre relatively to the average energetics and physiology lines</u> (dashed) on the rofogram mean that "meridian is directed to Yang".

All the values of the points' ECC when sounding them with the direct and reverse polarity current, i.e. the energetics and physiology lines, which are situated <u>closer to the edge relatively to the average energetics and physiology lines</u> (dashed) on the rofogram mean that "meridian is directed to Yin".

"**Norm**" – the points' ECC values lie within the limits of +/-7% from dashed lines (average physiology and energetics lines accordingly).

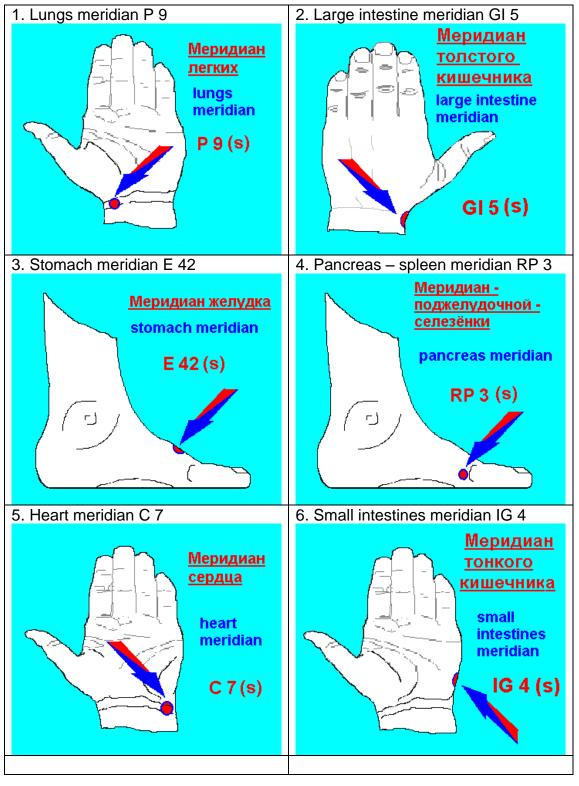
"Towards Yin" or "towards "Yang" – from 7 to 25% from dashed lines accordingly;

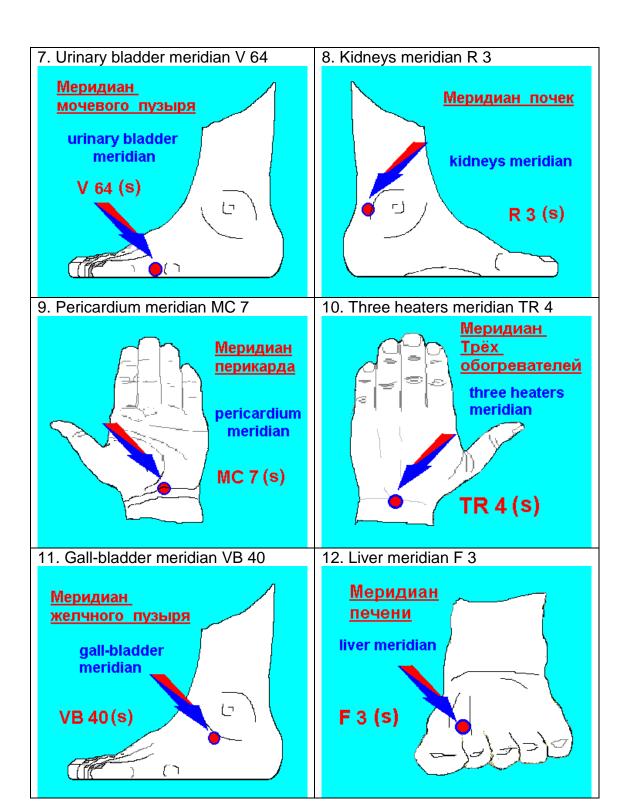
- "Strongly towards Yin" or "Strongly towards Yang" more than 25%;
- "Skewness" the difference between meridian branches (|s d|) in standard units is from 3 to 25%;
- "Parallel" the difference between meridian branches (|s d|) in standard units is up to 3%:

"Strong skewness" - the difference between meridian branches (|s - d|) in standard units is more than 25%.

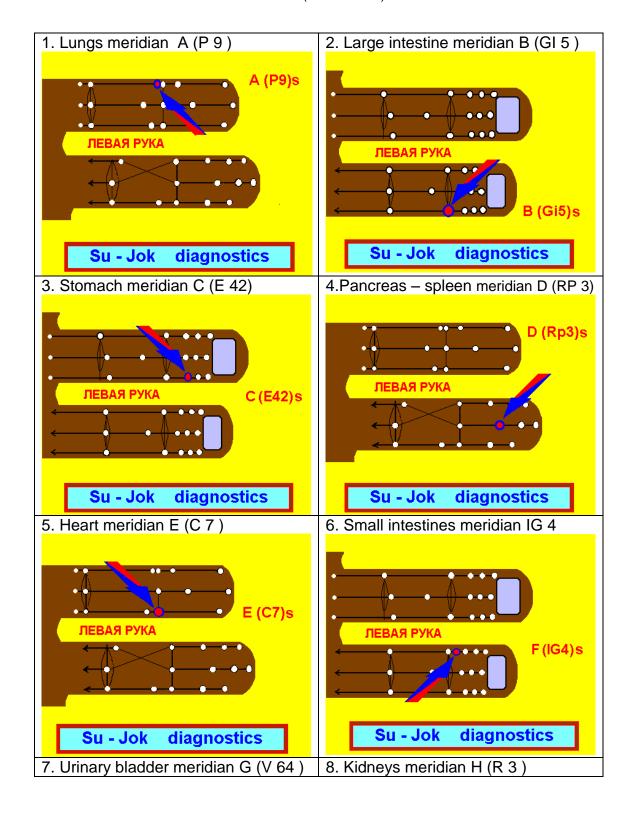
#### Topology of BAP, meridians measured

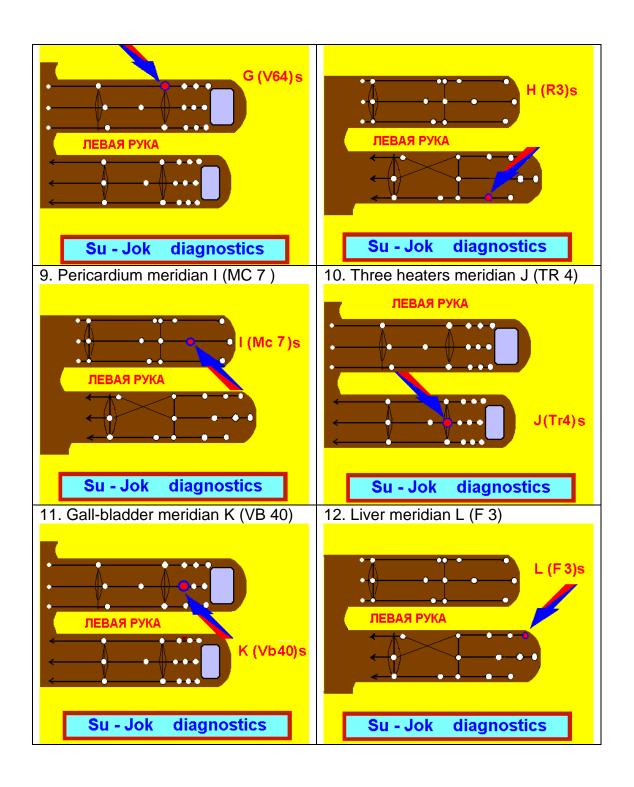
#### **Corporeal Method**





#### The Su Jok Method (LEFT HAND)





## The Rofogram Analysis (general regulations)

The analysis of the obtained electrochemical conductivity profiles is multi-stage:

1. At first the **ECC profiles' average lines** (according to our terminology – the average of the "energetics" lines – "e" and "physiology lines" – "f") are analysed from the point of their position in the diagram and to each other.

For the average e and f position comparative analysis the concept of "**group norm corridor**" is introduced. It is a part of a diagram between two concentric circles with values from 32 to 62%. On the ROFES sofware diagrams it is illuminated with green light.

- 1.1. The location of the dashed lines closer to the centre relatively to the group norm corridor corresponds to the patient's **emotional tension**. The analysis of particular broken lines between meridians will help discover the reason for patient's emotional tension, his or her predisposition towards active energy release or towards the state of "dormancy".
- 1.2. The location of the dashed lines closer to the diagram edge suggests the **state of neuropsychic asthenia**. Specific questions about the patient's state confirming asthenia allow to give diagnostics decision and determine the way for recovering together with treatment of the diseases diagnosed.
- 1.3. The functional norm is when the average lines are located so that f > e in the interval from 2 to 5%
- 1.4. If f < e, then for the patient diagnosed it is a sign of overstrain, both physical and emotional. It is necessary to excluded the following situations when this state is considered to be normal:
  - measurement is taken in hot, stuffy weather;
  - patient overheated in the sun
  - measurement is taken after therapeutic treatment (especially after treatment on energy level scenar, extrasensory impact);
  - as a result of this state excessive sleepiness or stupor;
  - the device normalisation is conducted incorrectly (in case when individual adjusting file does not correspond to your "ROFES" measuring unit), in this case the results interpretation will be incorrect.
- 1.5. If f >> e, then for this patient it is typical that his or her meridian system is not sufficiently filled with energy. It can be a sign of long stay in geopathogenous zone, a kind of energy loss.
- 2. Then "physiology" and "energetics" lines in every meridian are analysed: how they coincide, diverge and cross.
- 2.1. The red and blue broken lines correlate according to the rules mentioned in points 1.4. and 1.5.
- 2.2. If red and blue broken lines coincide ("adhesion") when analysing the meridian's state it confirms the fact that there is inflammation process in the organs controlled by this meridian.
- 3. Then the state of **meridian branches** is analysed: divergence or coincidence of values of BAP reaction to the impact of direct and reverse polarity current.
- 4. If the ECC values profiles look too much broken (6 and more sharp angles, the rofogram looks like "hedgehog") it is the consequence of nervous system instability and unbalanced temper. So it is a sign of patient's emotional destabilisation.

#### **Clinical Aspects of the Rofes-diagnostics**

In contrast to western approach to diagnostics based on nosology principle, acupuncture reflexodiagnostics is based on patient's state syndromic assessment, on the system approach towards patient's state. For better understanding and in order to simplify practical application of Orient medicine essential principles for doctors taught according to European diagnostics school, we name the most frequently occurring rofogram changes and point out the list of possible disease nosology forms within which it is easier to make an ultimate clinical diagnosis. The possibility of coincidence of conclusions obtained with the ROFES diagnostics and clinical diagnoses made as a result of deep clinical and laboratory diagnostics is rather high – 85 – 90% (see Appendix 1).

## MERIDIANS STATE DESCRIPTION Direction to Yang (for all meridians PHYSIOLOGY > ENERGETICS)

for all clinical interpretations the process seriousness will be caracterised by the extent of divergence from the average lines

MERIDIANS STATE DESCRIPTION

«Parallel Yang (s = d)»

Lungs meridian P

Meridian status:

Parallel Yang (P(s)=P(d))

The following clinical interpretation of the meridian status is:

-Acute, subacute superior respiratory tract inflammation (closer to the center of the rofogram)

Large intestine meridian GI

Meridian status:

Parallel Yang (GI(s)=GI(d))

The following clinical interpretation of the meridian status is:

- -Corrected large intestine inflammation
- -Spastic colitis
- -Diarrhea
- -Confirms superior respiratory tract inflammation (in combination with P in Yin)
- -If it is greatly to Yang, appendicitis is suspicious.

Stomach meridian E

Meridian status:

Parallel Yang (RP(s)=RP(d))

The following clinical interpretation of the meridian status is possible:

- -Corrected gastritis with sub acidity
- -Exclude poisoning

Pancreas meridian RP

Meridian status:

Parallel Yang (RP(s)=RP(d))

The following clinical interpretation of the meridian status is:

- -Acute pancreatitis
- -Hypoglycemia
- -Haemapathia (laboratory analysis is essential!)

Heart meridian C

Meridian status:

Parallel Yang (C(s)=C(d))

The following clinical interpretation of the meridian status is:

- the average showing (hatching) in Yang below 20% is a norm.

If >20%:

- corrected myocarditis
- preinfarction condition
- infarction

Refer to the confirmation by MC.

Small intestine meridian IG

Meridian status:

Parallel Yang (IG>ig) (IG(s)=IG(d))

The following clinical interpretation of the meridian status is:

- -Enteritis
- -diarrhea
- -Ischemic insultus (?- to Yang greatly)
- -Corrected dysbacteriosis

Urinary bladder meridian V

Meridian status:

Parallel Yang (V(s)=V(d))

The following clinical interpretation of the meridian status is:

-Pyelocystitis, cystitis, vaginitis, prostatitis, colpitis, adnexitis.

Each diagnosis depending on the patient's sex and clinic symptoms.

In case the woman has the intrauterine spring, the hatching line in Yang below 20% is a norm.

-Lumbalis- sacralis radiculitis

Kidneys meridian R

Meridian status:

Parallel Yang (MC(s)=MC(d)

The following clinical interpretation of the meridian status is:

- -Corrected pyelonephritis
- Ureter diseases
- Acid urine diathesis

Pericardium meridian MC

Meridian status:

Parallel Yang (MC(s)=MC(d)

The following clinical interpretation of the meridian status is:

CNS exhaustion

- Cardioneurosis
- Insultus
- Radiculitis or cervical osteochondrosis (refer for the confirmation by GI in Yin, P in Yin)

Three heaters meridian TR

Meridian status:

Parallel Yang (TR> tr) (TR(s)=TR(d))

The following clinical interpretation of the meridian status is:

- Thyreotoxicosis
- Endocrine secretion gland hyperfunction
- Suspicious pheochromocytoma if AP is above 220 mm.
- Confirms inflammation at superior, medial abdominal regions
- Lympholeukemia (integral haema analysis is necessary)

Gall bladder meridian VB

Meridian status:

Parallel Yang (VB(s)=VB(d)

The following clinical interpretation of the meridian status is:

- Hypertonic gall bladder
- Gall supply into duodenum
- Neuritis
- Neuralgia

Liver meridian F

Meridian status:

Parallel Yang (F(s)=F(d)

- Reactive hepatitis
- Sex hormone hyperactivity (the satisfaction problem)

«Skewness Yang (s < d)»

Lungs meridian P

Meridian status:

Yang distortion (P(s) < P(d))

The following clinical interpretation of the meridian status is possible:

Sub-acute, acute inflammation, mainly, of superior respiratory tract on the left.

Large intestine meridian GI

Meridian status:

Yang distortion (GI(s)<GI(d)

The following clinical interpretation of the meridian status is:

- Corrected inflammation of large intestine on the left (sigmoid colon).
- Confirms the inflammation of superior respiratory tract with clinic symptoms on the left.

Stomach meridian E

Meridian status:

Yang distortion ((E(s) < E(d))

The following clinical interpretation of the meridian status is:

- -Corrected gastritis with subacidity on the stomach bottom (inlaid secretion is possible)
- -Confirms inferior thorax vertebral radiculitis on the left.

Pancreas meridian RP

Meridian status

Yang distortion (RP(s)<RP(d))

The following clinical interpretation of the meridian status is:

- -Inflammation of pancreas' tail
- -Spleen trauma is possible

Heart meridian C

Meridian status

Yang distortion (C(s)< C(d))

The following clinical interpretation of the meridian status is:

- vitium cordis valva sinistra
- arrhythmia of various genesis
- dys-conductivity on the Gese beam
- AP fluctuation

Small intestine meridian IG

Meridian status

Yang distortion (IG(s)<IG(d))

The following clinical interpretation of the meridian status is:

- small intestine' descending region inflammation
- Sinister cerebral hemorrhage, happen recently when the Yang distortion is great (of a various etiologia).

Urinary bladder meridian V

Meridian status:

Yang distortion (V(s)<V(d))

The following clinical interpretation of the meridian status is:

- Inflammation of ovarium dextrum
- Ischeoradiculitis sinister
- Pyelocystitis
- Cystitis

(Each diagnosis depending on the sex)

lumbalis- sacralis radiculitis with clinic symptoms on the left mostly.

Kidneys meridian R

Meridian status:

Yang distortion (R (s)< R(d))

The following clinical interpretation of the meridian status is possible:

- sinister kidney' corrected pyelonephritis
- Nephroptosis sinister

Pericardium meridian MC

Meridian status:

Yang distortion (MC(s)<MC(d))

The following clinical interpretation of the meridian status is possible:

- Uniting with the C in Yang, verifies cardiopathia.
- sinister cerebral insultus (in the combination with other diagnoses)
- If the distortion is significant, epilepsy syndrome is suspicious.

If the DISTORTION between s and d starting from the very centre of the rofogram in combination with the distortions on other meridians is great, oncologic diseases are susceptible (Delete the emotional dys-balance).

SEE THE CONFIRMATION BY THE OTHER MERIDIANS

Three heaters meridian TR

Meridian status:

Yang Distortion (TR(s) < TR(d))

The following clinical interpretation of the meridian status is:

- -Thyreotocsicosis
- -Endocrine secretion gland hyperfunction
- -Suspicious pheochromocytoma if AP is above 220 mm.
- -Confirms inflammation at superior, medial abdominal regions
- Lympholeukemia (integral haema analysis is necessary)

Gall bladder meridian VB

Meridian status:

Yang distortion (VB(s)<VB(d))

The following clinical interpretation of the meridian status is:

- -Hypertonic gall bladder
- Gall supply into duodenum
- Neuritis
- Neuralgia
- Cholecystitis, perecholecystitis
- Cholangitis
- Megrim

SEE THE CONFIRMATION BY THE OTHER MERIDIANS

Liver meridian F

Meridian status:

Yang distortion (F(s) < F(d))

The following clinical interpretation of the meridian status is:

- -Mastopathia, mamma sinistra, mainly.
- -Beginning cirrhosis hepatis (necessary to refer to the anamnesis)
- -Hepatitis

«Skewness Yang (s > d)»

Lungs meridian P Meridian status: Yang distortion (P (s)> P (d)) The following clinical interpretation of the meridian status is:

- Sub-acute, acute inflammation of superior respiratory tract, mainly, on the right.

Large intestine meridian –GI

Meridian status:

Yang distortion (GI (s)> GI (d))

The following clinical interpretation of the meridian status is:

Corrected inflammation on large intestine on the right (on caecum)

Stomach meridian E

Meridian status:

Yang distortion (E(s)>E(d))

The following clinical interpretation of the meridian status:

- Symptoms of gastroduodenitis
- Erosion gastroduodenitis
- Confirmation of inferior thorax vertebral radiculitis on the right.

Pancreas meridian RP

Meridian status:

Yang distortion (RP(s)>RP(d))

The following clinical interpretation of the meridian status is:

- Inflammation of capitulum pancreatis
- Delete contusion of spleen.

Heart meridian C

Meridian status:

Yang distortion (C(s)>C(D))

The following clinical interpretation of the meridian status is:

- vitium cordis valva dextra
- arrhythmia of various genesis
- dys-conductivity on the Gese beam
- AP fluctuation

Small intestine meridian IG

Meridian status:

Yang distortion (IG(s)>IG(d))

The following clinical interpretation of the meridian status is:

- small intestine' ascending region inflammation.
- Dextral cerebral hemorrhage, recently happen when the Yang distortion is great (of a various etiologia).

Urinary bladder meridian V

Meridian status:

Yang distortion (V(s)>V(d))

The following clinical interpretation of the meridian status is:

- Inflammation of ovarium dextrum
- Dextral ischeo-radiculitis
- Pyelocystitis
- Cystitis

(Each diagnosis depending on the sex)

- *lumbalis*- sacralis radiculitis with a clinic symptom on the right mostly.

Kidneys meridian R

Meridian status:

Yang distortion (R (s)> R(d))

The following clinical interpretation of the meridian status is:

- dextral kidney' corrected pyelonephritis
- dextral nephroptosis

Pericardium meridian MC

Meridian status:

Yang distortion (MC(s)>MC(d))

The following clinical interpretation of the meridian status is:

- In uniting with the C in Yang verifies cardiopathia.
- Dextral cerebral insultus (in the combination with other diagnoses)
- If the distortion is great, epilepsy syndrome is suspicious.
- If the DISTORTION between s and d starting from the very centre of the rofogram in combination with the distortions on other meridians is significant, oncologic diseases are susceptible. (Delete the emotional dys-balance).

Three heaters meridian TR

Meridian status:

Yang Distortion (TR(s)> TR(d))

The following clinical interpretation of the meridian status is:

- Thyreotoxicosis
- endocrine secretion gland hyper-function
- Suspicion to pheochromocytoma, if AP is above 220 mm.
- Confirms the inflammation on superior, medial abdominal regions
- Lympholeukemia (integral haema analysis is necessary)

Gall bladder meridian VB

Meridian status:

Yang distortion (VB(s)>VB(d))

The following clinical interpretation of the meridian status is:

- -Hypertonic gall bladder
- Gall supply into duodenum
- Neuritis
- Neuralgia
- Cholesyctoectomia

Liver meridian F

Meridian status:

Yang distortion (F(s)>F(d))

The following clinical interpretation of the meridian status is possible:

- -Mastopathia, prior on mamma dextra
- -Beginning cirrhosis hepatis (necessary to refer the anamnesis)
- -Hepatitis

ATTENTION !!! For leaving on concrete forms of diseases it is NECESSARY WITHOUT FALL to use status conclusion data and conduct a questioning a patient according to that types of diseases, which specified on the condition of meridian !!!

## Meridian is directed to Yin (for all meridians PHYSIOLOGY > ENERGETICS)

These algorithms are also calculated by the ROFES software Expert System on the basis of expert assessments data included in it.

#### Possible clinic variants for meridian combinations

To make the roforgams clinic interpretations easier we offer some ROFES-diagnostics algorithms. These algorithms are created on the basis of many years' experience of frequently occurring diseases and can be used by doctors for the screening diagnostics.

We give a longer list of ROFES-diagnostics algorithms (about 40 combinations) at our further training courses for specialists who are already experienced in this diagnostics. These algorithms are also calculated by the ROFES software Expert System on the basis of expert assessments data included in it (method of body's functional state electropuncture measurement with expert assessment (ROFES-diagnostics). Patent for invention №202278).

**Preoncology:** the state of the meridian controlling this organ – is always to YIN, TR – sharply to Yin, MC – sharply to Yang (the "rofes-diagnostics" method allows to diagnose oncological diseases at their early stage – pre-clinical. At the stage of oncology clinical presentations when the process has become a part of body homeostasis, "rofes-diagnostics" does not reveal the disease itself but discovers attendant abnormalities in organs and systems).

**Migraines**, **neuralgias**: E,VB,MC directed to Yang with slight skewness or parallel.

**Gastroduodenitis, ulcer, erosion of duodenum:** E ; IG; RP – skewness in Yang is possible; in recovery – intersection.

**Chronic bronchitis, pneumonia :** P, GI parallel or with skewness, directed to Yin. TR trends to Yin, during exacerbation can be in Yang.

**Respiratory tracts infected, anginas, maxillary sinusitis :** P, MC to Yang, skewness is possible, GI slightly to Yang, TR to Yin – depending on the acute respiratory viral infection stage.

**Exertional angina, high blood pressure:** C, MC to Yang (is also possible for infarct); IG to Yang; F to Yin; TR to Yang.

**Postinfarction state:** C, MC, TR to Yin with skewness (wide corridor between e and f – possibility of early atherosclerosis).

**Chronic ENT infection:** P to Yin, sharp skewness of MC to Yin, TR to Yin with skewness, intersection is a sign of recovery.

**Stroke:** IG maximum to Yin with high skewness between branches, VB on the first stage – to Yang, then to Yin, F, TR to Yin.

**Cirrhosis:** F sharply to Yin, VB, E, RP to Yin

ATTENTION !!! For leaving on concrete forms of diseases it is NECESSARY WITHOUT FALL to use status conclusion data and conduct a questioning a patient according to that types of diseases, which specified on the condition of meridian !!!

#### The rofes-diagnostics psychological aspects

Any behavioral response of a person is conditioned by personality's motivation and stimulating aspects. However, any motive will be realised only after going through the individual's emotional mood prism and will be less disfigured in case a person is able control this sphere in the most effective way. This ability is combined from his/her basal characteristics, moral and ethic principles.

Hereditary characteristics and social background will amend the development of all the system included in the integral individuality structure (Merlin V.S. Psychology of individuality. The psychologists of fatherland. 1996). The development of the vital activity system (body's physiological structures) and psychic features (psychic functions generated by body) during the personality development occurs simultaneously with the development of the meridian structure which unites them into one common integral individuality structure. Consequently, the result of this development an be recorded by special devices aimed at body's functional state diagnostics by the meridian structure state (See appendix: "Determining body's adaptation capacity on the basis of body's meridional structure state analysis" Kornyukhin A.I.).

This assumption is based on the latent analysis the distinctive feature of which is the idea of the connection of the theoretic (latent) variable with the object's observed and measured featured, i.e. the theoretic variable changes via observed physiological characteristics.

The "rofes-diagnostics" assumes the possibility to determine person's emotional state through meridian structure because, according to Orient-philosophy doctrine about body's energy structure, meridian system is responsible not only for body's physiological state – a number of organs and systems – but also for emotional state, the level of thought activity, spheres determining person's behaviour and comprehension of this or that situation, control over affective states.

The body's meridian system reacts almost at once to environmental changes and also immediately reflects body's state changes – functional and psychic in response to changing environment.

Person's emotional mood determining his/her behavioral response and depending on his/her permanent psychological characteristics belongs to mental states, i.e. more short-term. That is why person's emotional mood, i.e. mental state at a given point in time, can be better recorded by hardware devices aimed at meridional diagnostics.

Out of all this it can be concluded that body's meridian structure state analysis will give only mental states' characteristics but the total of these mental states leads to more permanent psychological characteristics.

Thus, child's peculiarities of attention, emotional and functional states are closely connected with features of character and temperament. For example, more active and sturdy children feel so called "sthenic" emotions of happiness or anger more often while melancholic (emotionally unstable and introverted) feel "asthenic" emotions (sadness, fear).

The Orient and western conceptions of body's structure analysis differ mostly by terminology, attributing different meanings to the same term. It happens because some of these terms are rejected by classic "westerners" because they are used to see this terminology in non-scientific literature.

Now let us point out a short list of mental states accepted by classic western psychology that differs emotional and functional states of a person.

Emotional states: - happiness (satisfaction, joy); - sadness (apathy, grief, depression); - anger (aggression, exasperation); - fear (anxiety, fright); - astonishment (curiosity); - aversion (contempt, squeamishness).

Functional states are connected with the extent of wakefulness and attention: - sleep; - drowsiness; - calm wakefulness; - active attention (orientation reaction); - tensed attention (anxiety, stress mobilisation); - tiredness (exhausted attention, distress). [The Fundamentals of Psychodiagnostocs. Shmelev A.G. Book for students of teachers' training institutes. Moscow. P.86. 1996].

For comparison we will make a quotation about psychological aspects (in "origin" understanding) corresponding to body's meridian system. This quotation is from Havaa Luvsan's (one of the initiators of acupuncture diagnostics and treatment in Russia) book titled "Articles on Orient reflexotherapy methods" [15] where he describes the "U-sin" ancient eastern conception which is the basis for philosophers, healers, doctors and in general it is the underlying conception for Orient world view.

"In Chinese medicine there are several moods to be distinguished that play an important role in the development of this or that disease when the mood is too intensive

Any healthy man has 7 moods: - joy; - anger; - fear; - thoughtfulness; - melancholy; - grief; - fright.

If these moods do not overstep certain limits in their demonstration it is the essential part of person's healthy mentality. If they are expressed too strongly they can become the reason for the disease development and, as a result, "chi" (Chinese term meaning one of the body's type of energy) is blocked and "internal fire" emerges (from treatise about eastern reflexotherapy).

Besides, for each mood there is an organ corresponding to it which is responsible for this mood and more vulnerable when certain mood predominates:

- joy corresponds to heart (heart is the place for mental energy). Large oscillations of joy may cause mental energy tension. When body lacks mental energy there can be painful feelings in the area of heart and insomnia.
- anger corresponds to liver. When person gets angry liver loses its balance, gets agitated and ill.
- fear and fright correspond to kidneys. In this case mental energy is very much tensed. Fear is formed basically from the kidneys' weak energy. ...
- thoughtfulness, grief correspond to spleen. Reverie is a concentration of mind on problems. This mental energy mobilisation damages spleen and pancreas. This may lead to loss of appetite, dyspepsia, asthenisation. Reverie may also damage heart

because heart is the mental energy centre. If heart is seized by grief, it may cause tachycardia, dullness, insomnia and forgetfulness.

- melancholy corresponds to lungs. Sorrow, grief, anxiety clinically develop together. When these emotions are excessive the signs of lungs lesion appear (paleness, hyperhidrosis, cough).

During treatment attention is paid not only to curing the organ itself but also to chi normalisation.

In ancient China one mood was treated with the help of other one:

- anger treated thoughtfulness, grief
- iov treated melancholy
- grief, melancholy treated fear, fright
- melancholy treated anger
- fear and fright treated joy"

Out of this quotation it becomes clear why for ancient reflexotherapists the highest achievement was the ability to cure their patients not by acupuncture treatment but by finding suitable moods. The influence of these emotions upon the patient led to recovery.

#### Meridians expert assessment in psychological aspect with the "rofes-diagnostics" method

The listed below criteria for the electropuncture diagnostics results' psychological interpretation can be attributed to people in wakeful state and perceiving the environment impact mostly adequately. People with obvious mental disorders were not diagnosed.

#### 1. TENDENCY "towards "Yang" (f >e)

#### Lungs meridian - P

The condition of the lungs meridian reflects criteria of one's freedom: freedom from unrealized desires and claims. Self-estimation, estimation of the environment.

Description of the meridian state (tendency "towards "Yang" (f >e) Possible state variants:

A person sticks to situation analysis, blaming oneself or the environment.

P(s) "towards "Yang" – blaming oneself.
P(d) "towards "Yang" – blaming the environment.

Characteristic at fixed ideas, fears, psychical disorders, and family conflicts.

As to capacity for work - leads to feverishness and discretion of actions which decreases professional indicators. To maintain them at the normal level, extra energy expenses are required. It keeps a person in higher emotional stress.

#### Large intestine meridian - GI

Reflects one's adaptability to social settings.

Self-assertion. Self-actualization.

Description of the meridian state (tendency "towards "Yang" (f >e)

Possible state variants:

Loss of life orientations. Lack of desires and stimulus to life.

In combination with P - "Towards Yin" - sadness.

A person tends to giving up fight for existence – a syndrome of being in despair.

In combination with P – "towards "Yang" – losing one's head

A person covers oneself from the environment.

Higher inclination to conflicts, opposition of one's "self", often without real estimation of a situation.

State – "I don't care. I'm sick and tired of everything, myself including" (characteristic of "trefoil" of the suicidal mood).

#### <u>Stomach meridian – E</u>

The state of this meridian reflects capacity for work and purposefulness (constituents of volitional motives).

An indicator of available physical and mental forces for solving problems in achieving goals.

Description of the meridian state (tendency "towards "Yang" (f >e)

"towards "Yang"

Possible state variants:

Accumulation of fatigue. It's hard for a person to bring the matter to its end.

In case of a constant indicator – characteristic of melancholiac.

"Energy comes slowly and leaves fast".

"Strongly towards Yang".

Possible state variants:

Complete fatigue. Lack of energy. Low capacity for work.

An indicator of physical and mental loading.

Confirms a depressive state. Loss of life orientation in combination with GI in YAN. Sluggishness. Sorrowful look.

In combination with RP – "Towards Yin" – loss of capacity for work due to fixing on bitter thoughts, or withdrawal from reality into the sphere of dreams and fantasy – possible for drug-addicts.

#### Pancreas - spleen meridian - RP

Reflects functional resources in the sphere of imaginative thinking and perception of the world.

Reflects changes in emotional sphere of a person.

Description of the meridian state (tendency "towards "Yang" (f >e)

"towards "Yang"

Possible state variants:

Reflects the result of moderate troubles in relationships with people, events (imaginative objects), leading to some distress and disappointment.

RP (s) – higher acceptance of one's role in what happens.

RP (d) – higher blaming on others for what happens.

In case of stable tendency of the meridian state in the given position – dominant imaginative perception of the environment (in combination with VB – in YAN). Characteristic of people of arts and children.

"Strongly towards Yang".

Possible state variants:

Short-term characteristics. Reflects the result of heavy troubles – deep distress over negative interrelations with the environment.

Deep emotions.

Jealousy flashes (relations with one's people are above all.

State of aloofness.

RP (s) – distress is mainly connected with one's people. Bitterness because of impossibility to help them (extreme attachment).

RP (d) – distress is mainly connected with surrounding people. Thinking of oneself as a victim, perception of the world only through one's "self".

Possibly, an attempt to analyze the situation (confirmed by combination with VB – in IN').

#### Heart meridian - C

Reflects the state of emotional sphere, one's sincerity.

Description of the meridian state (tendency "towards "Yang" (f >e)

"towards "Yang"

Possible state variants:

In case of constant characteristics: a sentimental and enthusiastic person, sensitive to negative and positive events ("takes everything to heart").

Possible sensitivity to critics.

For women – the norm.

For children - the norm.

For men – a sentimental nature.

At situational characteristics – an indicator of emotional feelings because of problems in relationship with the environment.

C (s) – in YAN – confirmation of introversion.

C (d) – in YAN – confirmation of extraversion.

#### "Strongly towards Yang".

Possible state variants:

Strong reaction to conflicts with one's people (s) and the environment (d).

Deep emotions. In this state a person withdraws into oneself and loses touch with reality (in case of weak conscientious control which, however, is conducted at the expense of compensatory forces, i.e. higher expenditure of inner energy). A person burns oneself with sufferings, thoughts, and possibly, condemnation.

Can be a result of extreme joy.

Confused thoughts.

Inability to make decisions.

State of excitement or confusion.

#### Small intestine meridian – IG

Reflects depth of feelings and sympathy.

Description of the meridian state (tendency "towards "Yang" (f >e)

"towards "Yang"

Possible state variants:

- more characteristic of analysts evaluating everything with one's mind and not heart;

- an indicator of recent light conflict which led to cordial emotions.

"Strongly towards Yang".

Possible state variants:

- an indicator of strong soul conflicts ("wounded heart")
- depression related to fixing on cordial feelings.

#### Bladder meridian - V

Reflects the emotional mood of a person.

A kind of neurotism scale – higher excitement or inhibition.

Description of the meridian state (tendency "towards "Yang" (f >e)

"towards "Yang"

Possible state variants:

Constraint moves (crossing with clinical – aches in lumbar-sacral spine). Weak manifestation of emotions; possibly, a result of strong emotional splash (phase of fatigue after stress). In case of combination with the meridian state reflecting depression – depressive state.

Peculiar to introverted persons.

Need in protection.

Higher interest in the other sex or withdrawal to the world of "illusions and fantasy", as a compensation of emotional deficiency.

"Strongly towards Yang".

Possible state variants:

Emotional inhibition.

V(s) = V(d) strong in YAN, characteristic of drug-addicts in the period of drug withdrawal, or persons with the like dependent states.

Suicidal tendencies – in combination with F "Towards Yin", RP "Towards Yin", GI in YAN, P in YAN, and E in YAN.

Tense life contradictions can be a stimulus (possibly, RP in YAN).

#### Kidnevs meridian - R

Reflects phobia, fears, and deep emotions of a person.

Description of the meridian state (tendency "towards "Yang" (f >e)

"towards "Yang"

Possible state variants:

Too high activity. Accumulation of the energy for overcoming the obstacle.

For purposeful, self-collected and industrious persons – critical indicator of rational use of the energy coming from the outside. In case of not revaluing the possibilities of using one's resources – addition of energy reserves of the kidneys.

An indicator of the higher pressing of negative information. The first phase – reaction of anxiety on the plot for stress appearing (syndrome of biological stress according to G.Selie).

As a possible discharge – increase in sexual potentiality.

"Strongly towards Yang".

Possible state variants:

Fear.

Fright.

Hopeless situation.

Loss of life orientation.

#### Pericardium meridian – MC

Reflects conduction levels of nerve impulses.

The state of the nervous system.

Description of the meridian state (tendency "towards "Yang" (f >e)

"towards "Yang"

Possible state variants:

Slight excitement.

"Strongly towards Yang".

Possible state variants:

Strong strain on the nerves.

A direct indicator of aggressive (from the point of view of a person) influence of the environment.

Neuroses.

#### Meridian of three heaters - TR

Control over affective states. An indicator of volition, stubbornness, suggestibility, and hypochondria.

The most significant meridian of influencing stressgen factors of the environment.

Description of the meridian state (tendency "towards "Yang" (f >e)

"towards "Yang"

Possible state variants:

Susceptibility to the influence of views and opinions from the outside and some frustration. Suggestibility.

Susceptibility to emotional breakdown.

Hypochondria.

In combination with P and VB – the norm – ability to accept opinions of the surrounding people in case of convincing arguments.

"Strongly towards Yang".

Possible state variants:

Complete disappointment in life.

Lack of control over affective states. Control over affective states is observed only in socially-significant situations at the expense of compensatory forces, through inner emotional stress, i.e. due to spending energy reserves of the organism (see meridian R).

TR (s) closer to the center – devastation.

#### Gall-bladder meridian - VB

Reflects the criteria of the intellectual sphere functioning.

Description of the meridian state (tendency "towards "Yang" (f >e)

"towards "Yang"

Possible state variants:

An indicator of intellectual tiredness, the result of intellectual overloading.

Inhibited process of thinking.

Children's long stay in this state leads to functional destroying the biliary system.

For children, more often –synthetical – the result of analyzing situations connected with one's family (see the confirmation on RP "Towards Yin").

Lower control over affective states.

"Strongly towards Yang".

Possible state variants:

Breakdown.

The result of long intellectual overloading or strong conflict with the environment. Inhibition of thinking processes.

In combination with meridian R "Towards Yin" - long sufferings, anxieties, and phobias.

#### Liver meridian – F.

The meridian state characterizes the result of the emotional state – depression, irritability, anger, and rage.

Description of the meridian state (tendency "towards "Yang" (f >e)

"towards "Yang"

Possible state variants:

The result of strong distress (s), possible offence or fury.

Aggressive reaction to influence from the outside (d).

"Strongly towards Yang".

Possible state variants:

Anger.

Fury – near the center of the plot.

#### 2. TENDENCY "Towards Yin" (f >e)

These algorithms are also calculated by the ROFES software Expert System on the basis of expert assessments data included in it.

As an example of psychological interpretation the "suicidal mood" rofogram is given. Fig. 6

The psychological interpretation of the patient with suicidal mood's state in this rofogram is the following:

Position of the broken line on the F meridian – depressive state;

Position of the broken line on the V meridian – accumulated inside aggressive emotional mood:

Position on the GI meridian – loss of guiding line in life;

Position of the broken line on the RP meridian – abstractedness from reality;

Position of the broken line on the P meridian – accusing himself and others of everything that happens;



Fig. 6

## Adaptability integral characteristics in the "rofes-diagnostics"

As a result of experimental research together with the Ural State Medicine Academy, medical psychology department, Russian Nuclear Centre, psychophysiolohy laboratory (city of Snezhinsk), etc., the ROFES-diagnostics method authors developed a number of personality's state integral assessments which allow to assess the extent of a human being, as a living hierarchical system, to fulfil his/her vital functions.

They are the following:

Vegetoemotional tone determination scale.

**Increased vegetoemotional tone** – the need for giving up energy. Corresponds to choleric and sanguine persons (extraverts), or to melancholic and phlegmatic persons (introverts) when they are disconcerted.

**Lowered vegetoemotional tone** – the need for receiving energy (need for peace) corresponds mostly to introverts (melancholic and phlegmatic persons). Or if extravert needs rest it is a sign of overwork and exhaustion.

As a result of experimental research analysis the method creators came to conclusion that it is necessary to obtain body's functional state automated integral assessment.

By **person's functional state** the total of components of the body's medical (clinical) states and its psycho-emotional background is meant. That is, when the environmental conditions change it is necessary to determine living system's dynamic balance – "homeostasis" ("the power of stability" G. Selye "Stress without distress").

The body's functional state expert assessments 5-point system was developed. These assessments were obtained on the basis of measurement data mathematical formalised analysis. These data are called **Adaptation Potential (from 0 to 100%)**, i.e., patient's state influenced by environmental stress factors. This state is a combination of personality's medical and psychological aspects. In other words, index of a person's level of harmony as a balance of his internal states – physiological and mental – in response to environmental conditions is assessed.

**Excellent state** (adaptation potential from 85 to 100%)

**Good state** (adaptation potential from 70 to 84%)

**Satisfactory** (adaptation potential from 55 to 69%)

<u>Unsatisfactory</u> (adaptation potential from 30 to 54%)

Recovery is needed (adaptation potential from 0 to 29%)

The effectiveness of the adaptation potential assessment 5-point scale is proven on the large variety of groups of people diagnosed. Among them are the following: the population of the East Ural radiation trace territory; participants of Chernobyl AES catastrophe; specialists working in contact with ionising radiation; participants of local military operations (Afganistan, Chechnya); imprisoned teenagers with deviant behaviour; pupils of general education schools (at different periods of academic year with different amount of load at school); socially adapted young people who graduated from pedagogic college; and people who were not exposed to social and ecological stresses but suffering from psychosomatic diseases.

Clinical approbation of the "rofes-diagnostics method" was conducted at the best hospitals in the country (Russian Scientific Centre for Rehabilitation and Physiotherapy, Ural State Medical Academy, Ural Regional Centre for Radiation Medicine, Novosibirsk Medical Institute, etc.). The ROFES set was included in the State List of Medical Products – certificate No. 98/219 – 125 of 20 July 1998.

#### Note:

In the ROFES software the above mentioned integral characteristics are calculated with consideration of patient's age and can therefore differ from the assessments given in this section.

#### Appendix 1

Table 1. Comparative data on diagnostics results with the "ROFES-universal" diagnostics and common diagnostic methods.

Nosology form	Number of measurements		Non-coincidence of results
1. Chronic gastroduodenitis	98	92 (93,9%)	6(6,1%)
2. Chronic colitis	29	16 (55,2%)	13 (44,8%)

3. large intestine dyskinesia	76	67 (88,2%)	9(11,8%)
4. chronic enterocolitis	12	8 (66,7%)	4 (33,3%)
5. chronic cholecystitis	71	58 (81,7%)	13 (18,3%)
б. Functional abnormalities of pancreas	53	38 (71,7%)	15 (28,3%)
7. Vegetovascular dystonia syndrome	25	20 (80%)	5 (20%)
8. Functional cardiopathy	18	16 (88,8%)	2(11,2%)
9. Nidus of nasopharynx chronic infection	86	83 (96,5%)	3 (3,5%)
10. Worsening of immune system functioning	42	36 (85,7%)	6 (14,3%)
11. Chronic pyelonephritis	6	5 (83,3%)	1 (16,7%)
12. Functional abnormalities of cervical part of spinal cord	46	39 (84,8%)	7 (15,2%)
Total:	562	478 (85,1%)	84 (14,9%)

The use of the "ROFES-universal" did not reveal any complications or contra-indications. It means that its application in child treatment and prophylactic institutions will allow to increase the quality of children somatic diseases diagnostics and to reduce the number of complications. No notes.

The head of hospital pediatrics in Novosibirsk Medical Academy, Doctor of Medical Sciences, Professor

L. Kaznacheyeva