



MAKATS V.G.

VEGETATIVE ESSENCE OF ACUPUNCTURE (FUNCTIONAL-VEGETATIVE LAWS)

INFORMATION 14)

Expert of the highest level of NAS of Ukraine, MD, professor (European centre for postgraduate education of doctors of the PO the "Ukrainian national Academy of Sciences")

На основі здатності біологічних систем генерувати слабкі струми в штучно утворене зовнішнє коло, відкрита невідома раніше функціонально-вегетативна система людини. Біофізичні феномени засвідчили реальність акупунктурних каналів традиційної китайської Чжень-цзю терапії і її безпосереднє відношення до вегетативного гомеостазу... Виявлені теоретичні і практичні помилки указують на необхідність перегляду низки східних і західних теоретичних концепцій.

Ключові слова: вегетативний гомеостаз, Чжень-цзю терапія, функціонально-вегетативна система людини

The book is the final edition and has no analogues. Previously unknown functional-vegetative system of human has been discovered on the basis of the ability of biological systems to generate weak currents into artificially created external circuit. Biophysical phenomena testify to the reality of acupunctural channels of the traditional Chinese *Zhenjiu* therapy and its direct relation to vegetative homeostasis... The disclosed theoretical and practical mistakes indicate the necessity of revision of a number of the Eastern and Western theoretical conceptions.

Key words: vegetative homeostasis, Zhen-Tszyu therapy, functional-vegetative system of the person.

На основании способности биологических систем генерировать слабые токи во внешний искусственный контур, открыта неизвестная ранее функционально-вегетативная система человека. Биофизические феномены свидетельствуют о реальности акупунктурных каналов Чжень-цзю терапии и её непосредственное отношение к вегетативному гомеостазу... Выявленные теоретические и практические ошибки указывают на необходимость пересмотра ряда восточных и западных теоретических концепций.

Ключевые слова: вегетативный гомеостаз, Чжень-цзю терапия, функционально-вегетативная система человека

Introduction

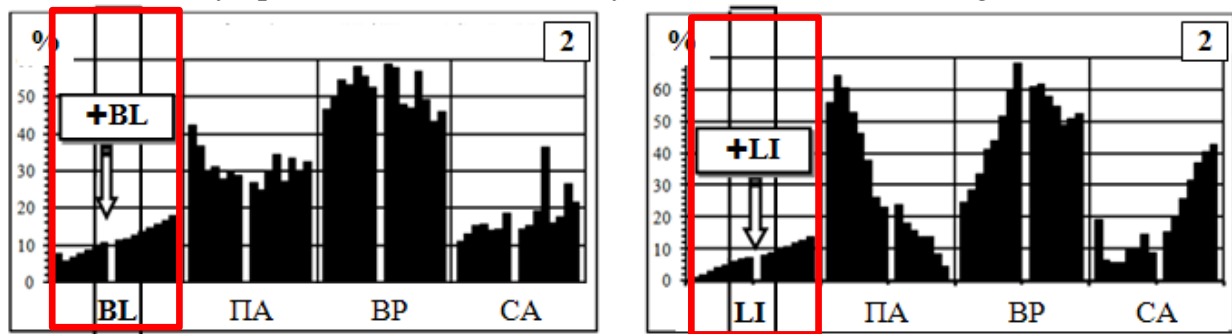
Analysis of the previous material unambiguously testifies that a number of cases of sympathetic activity can possibly depend on the growth of activity of the functional systems of the *YANG*-group, and parasympathetic – on the growth of activity of the functional systems of the *YIN*-group.

There is an issue of interdependent dynamics of vegetative indexes of (SA and PA) with the indexes of the zone of vegetative equilibrium.

1. VEGETATIVE DISPERSION FOR EXCITATION OF THE SEPARATE REPRESENTATIVE OF "FAZ"

Sympathetic vegetative dispersion during excitation of *YANG*-group

Growth of activity of any of *YANG* systems (LI-ST-TE-SI-GB-BL) to- and higher of the zone of individual functional norm conditions regular sympathetic dynamics of functional-vegetative homeostasis. The latter is accompanied by the decrease of a number of cases of parasympathetic activity (PA=ΠA), increase of cases of vegetative equilibrium (VE=BP) and sympathetic (SA=CA) activity (12. 347 observations, fig.1).



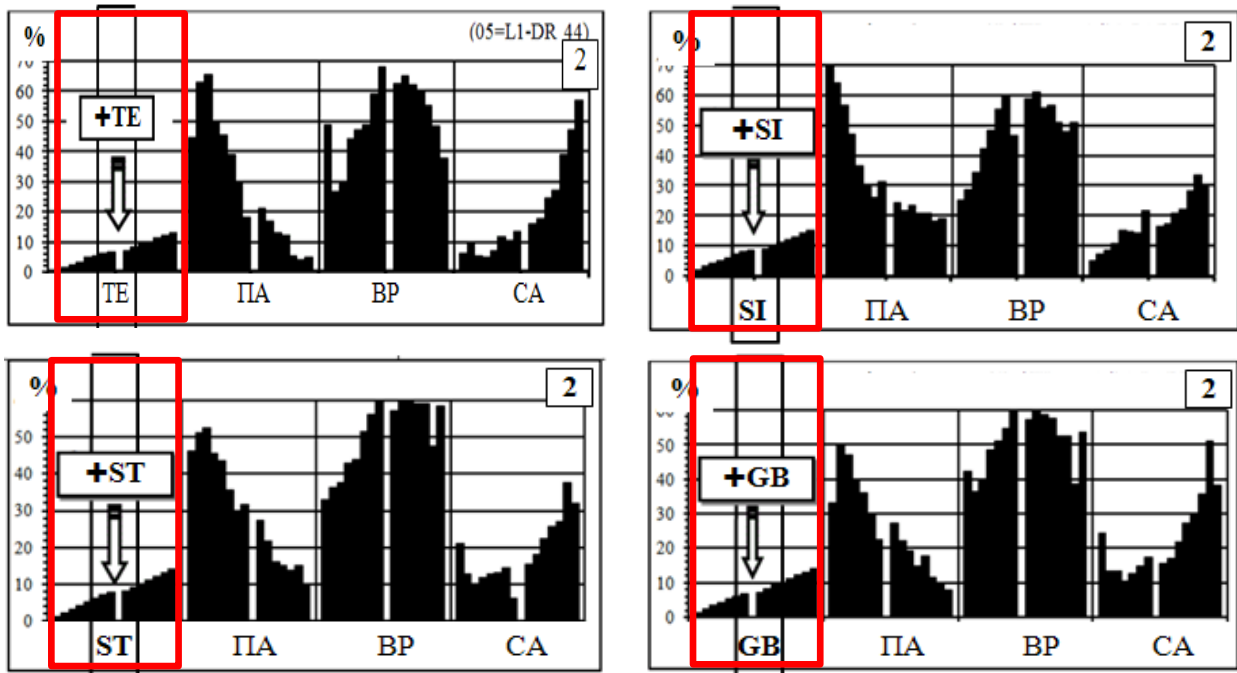
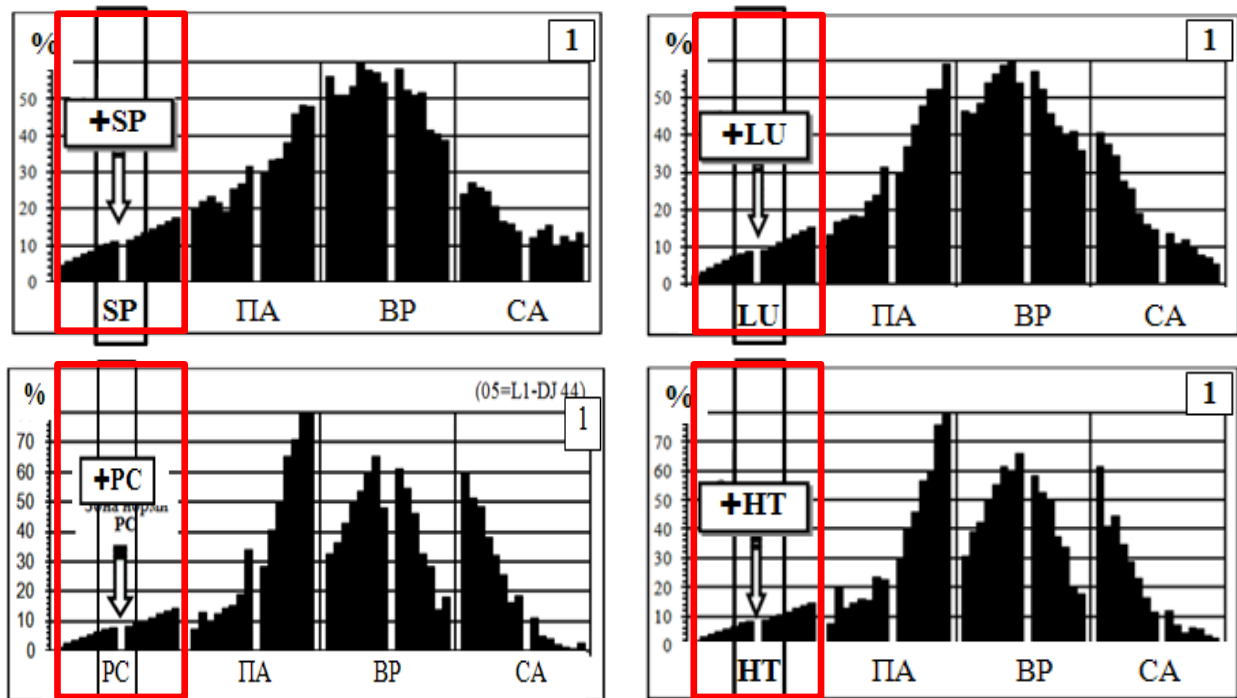


Fig.1 Sympathetic vegetative dispersion during + of YANG-group

Interesting to note the inert dynamics of the indexes of sympathetic and parasympathetic activity during excitation of the functional system BL.

Parasympathetic vegetative dispersion during excitation of YIN systems

Growth of activity of any *YIN* system (LU-SP-PC-HT-LR-KI) to- and higher of the zone of functional norm conditions regular parasympathetic dynamics of vegetative homeostasis: growth of parasympathetic activity ($PA=IIA$), a decrease of vegetative equilibrium ($VE=BP$) and sympathetic ($SA=CA$) activity (12.347 observations, fig.2). Interesting to note the buffer relation of functional activity of LR to the indexes of vegetative homeostasis.



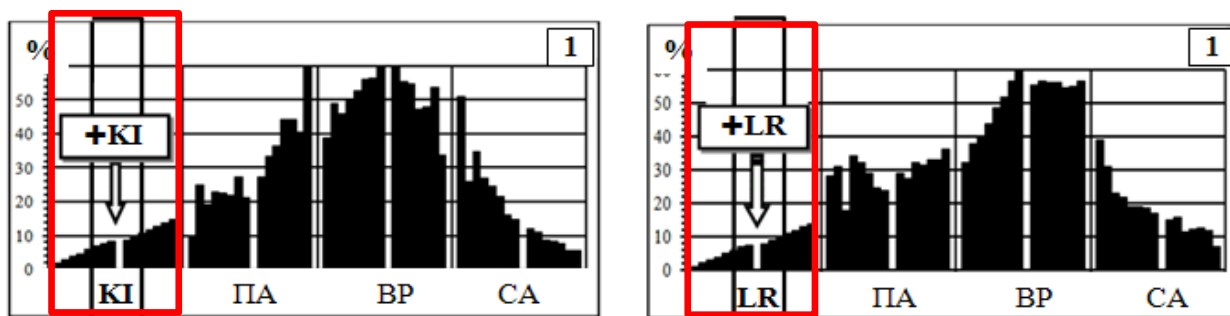
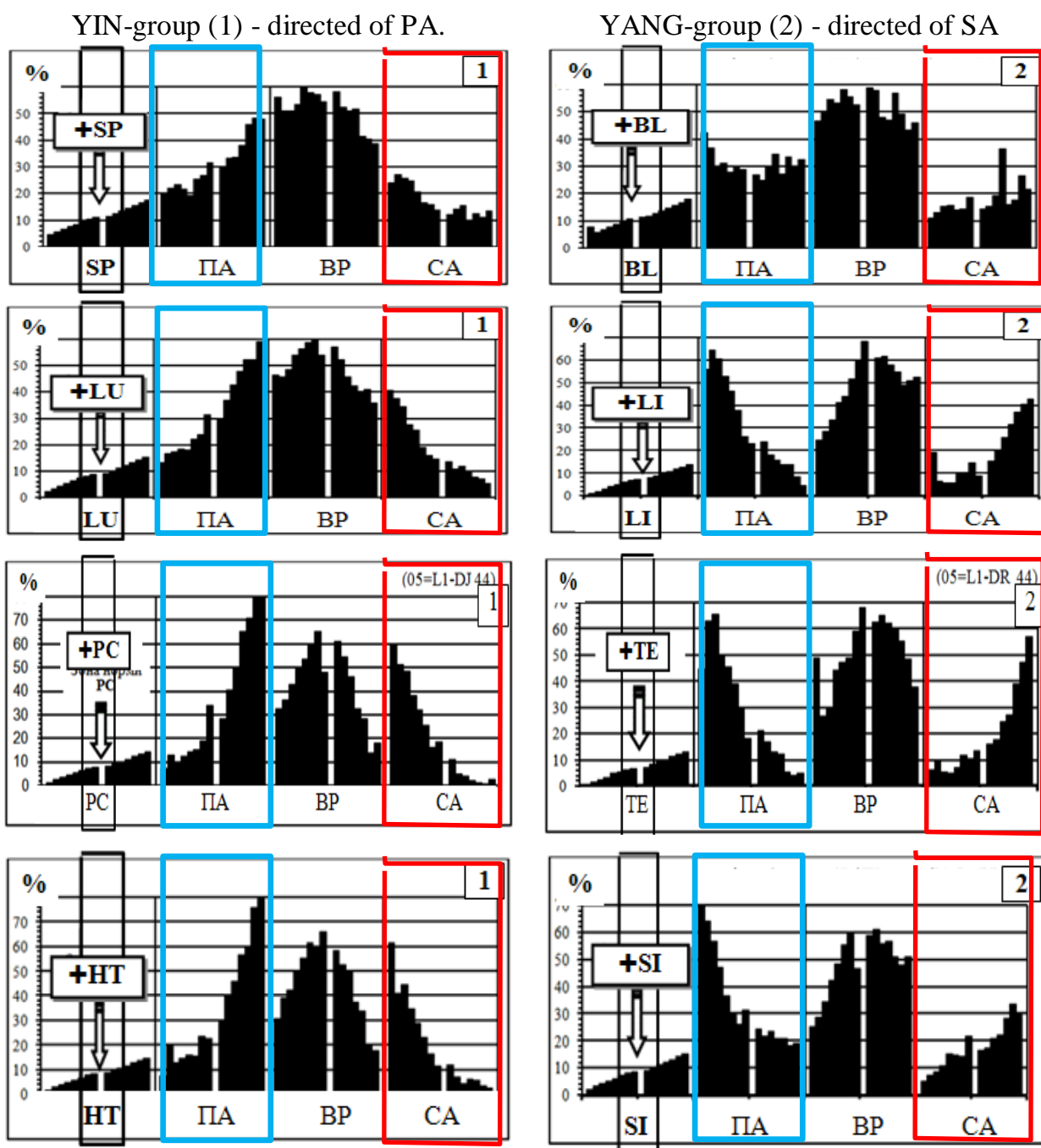


Fig.2 Parasympathetic vegetative dispersion during \pm of YIN-group

And now let us compare the dispersion of vegetative indexes during excitation of separate YANG and YIN channels and see their orientation (fig.3)...

Dispersion of vegetative indexes through YANG-YIN groups



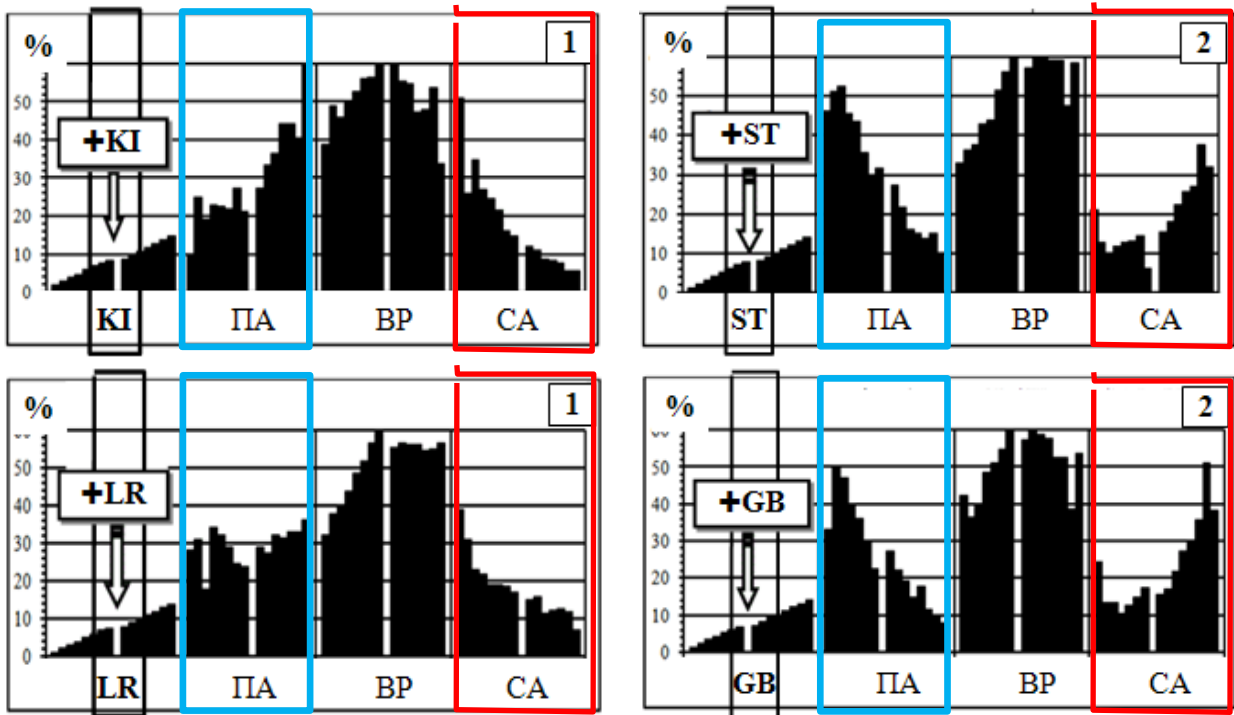


Fig.3 Dispersion of vegetative indexes during + of YANG-YIN groups.

2. VEGETATIVE PROFILES (VP) AS A BIOPHYSICAL REALITY

Detailed analysis of the previous material allowed discovering the phenomenon of Vegetative profiles (VP). Its reality testifies to the following.

1) Growth of parasympathetic oppression depends on the excitation of the functional systems of the *YIN* group (SP, LU-PC-HT, LR-KI). At the same time the leading role is of the system SP. 2) Growth of sympathetic excitation depends on the excitation of the functional systems of the *YANG* group (BL, LI-TE-SI, ST-GB). At the same time the leading role is of the system BL. 3) The structure of functional-vegetative profiles of sympathetic and parasympathetic orientation is mirror-opposite. 4) The forms of vegetative profiles of female and male groups are identical, which is the evidence of functional regularity. 5) The structure of functional-vegetative profile shows the level of vegetative disorder.

Now, let us view the functional-vegetative profiles (VP) of sympathetic (SA) and parasympathetic (PA) activity in female (9.947 observations) and male (5.492 observations) groups (fig.4-10).

PROFILES OF VEGETATIVE HOMEOSTASIS IN FEMALE AND MALE GROUPS

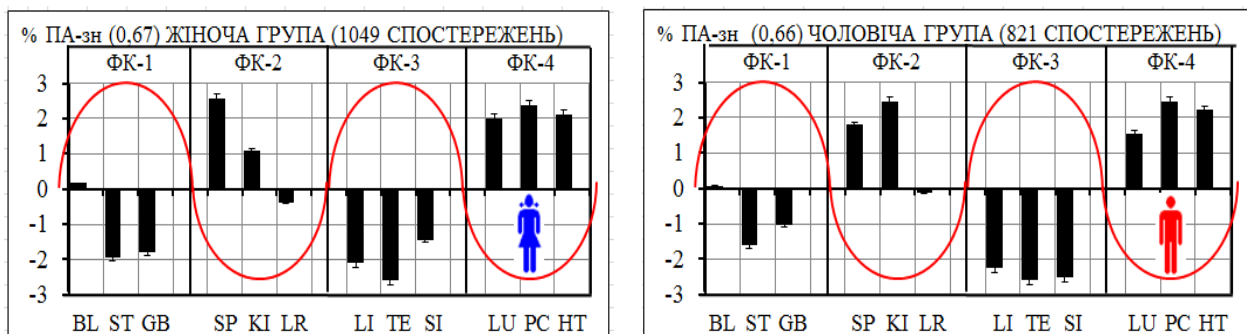


Fig.4 Vegetative profile of significant prevalence of parasympathetic activity (PA-s) in female and male groups.

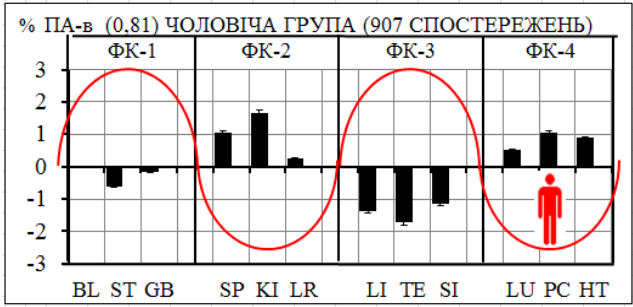
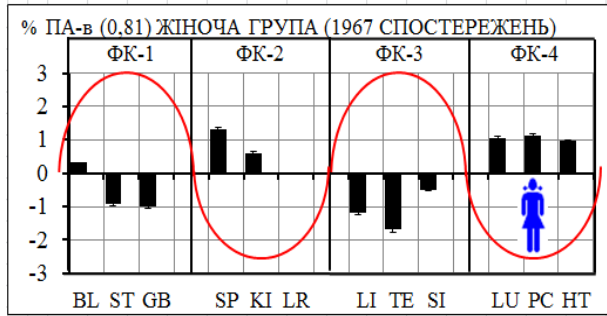


Fig.5 Vegetative profile of expressed prevalence of parasympathetic activity (PA-e) in female and male groups.

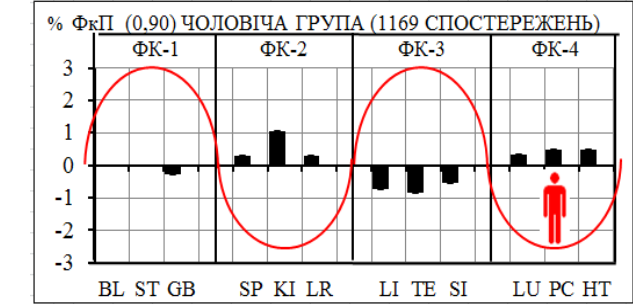
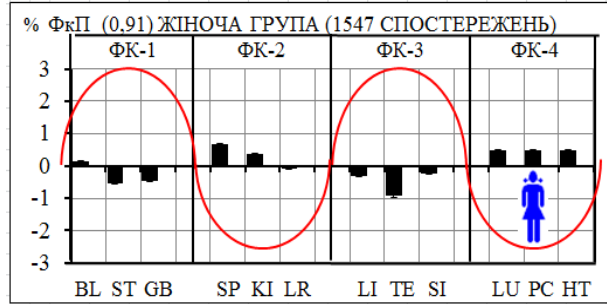


Fig.6 Vegetative profile of functional compensation of parasympathetic activity (FcP) in female and male groups.

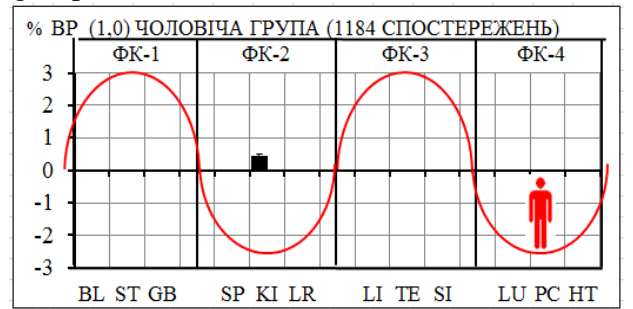
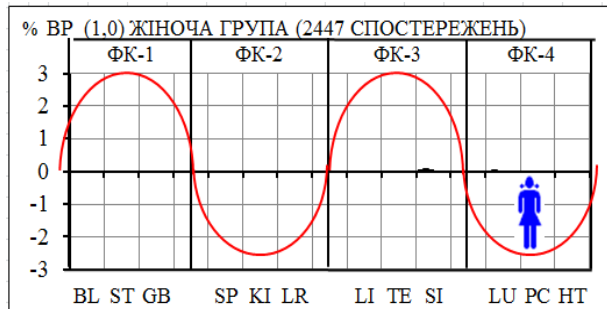


Fig.7 Vegetative profile of functional equilibrium (VE) in female and male groups.

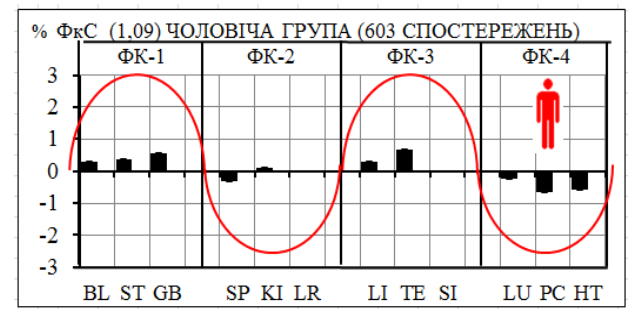
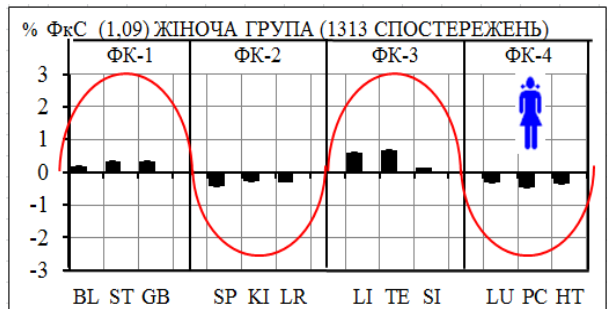


Fig.8 Vegetative profile of functional compensation of sympathetic activity (FcS) in female and male groups.



Fig.9 Vegetative profile of expressed prevalence of sympathetic activity (SA-e) in female and male groups.

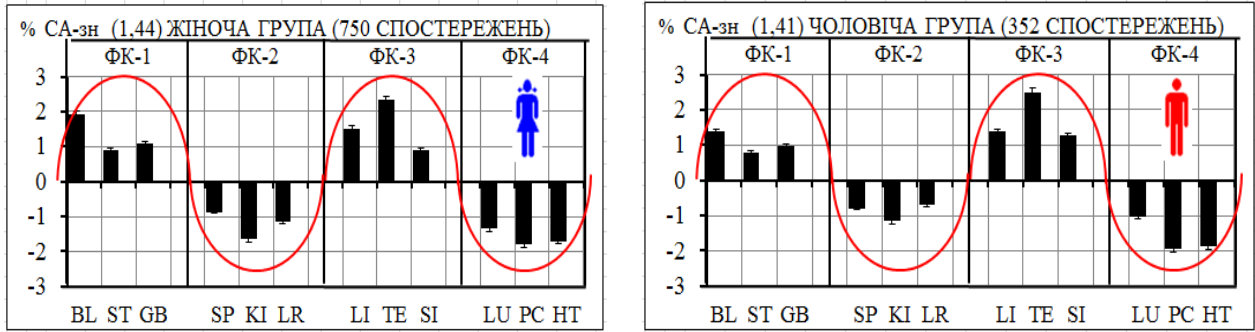


Fig.10 Vegetative profile of significant prevalence of sympathetic activity (SA-s) in female and male groups.

The comparative analysis of the introduced histograms points to four substantial provisions.

1.The parasympathetic orientation of the vegetative homeostasis is formed by the prevalence of the activity of **SP** over **BL** (fig.11, see arrow).

2.The sympathetic orientation of vegetative homeostasis is formed by the prevalence of the activity of **BL** over **SP** (fig.12, see arrow).

3.Vegetative profiles of parasympathetic and sympathetic activity are diametrically opposite (fig.11-12). Their vegetative coefficients point to the levels of vegetative disorders...

4.There are governing and subordinate leading systems in every functional complex (FC) (fig. 11-12). The governing are BL (FC-1) and SP (FC-2). The subordinate are – ST (FC-1), KI (FC-2), TE (FC-3) and PC (FC-4), which is pointed by the prevalence of their internal-complex activity.

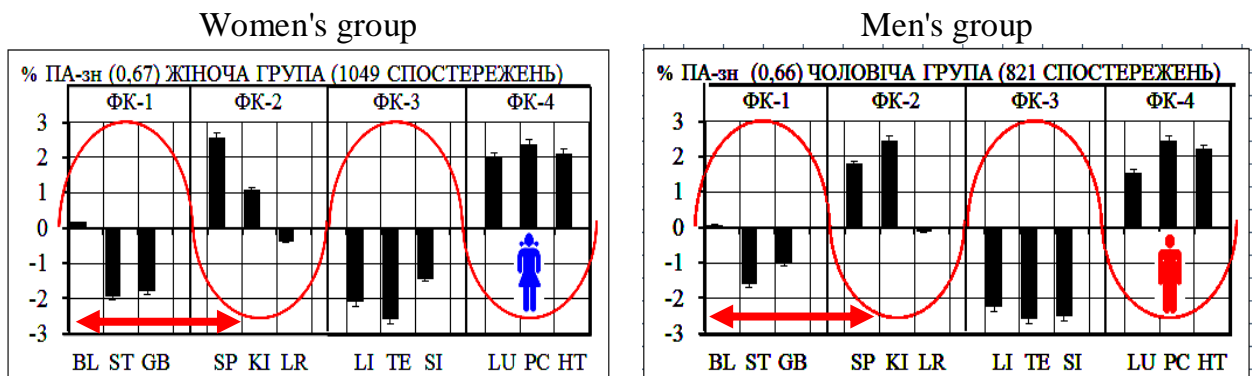


Fig.11

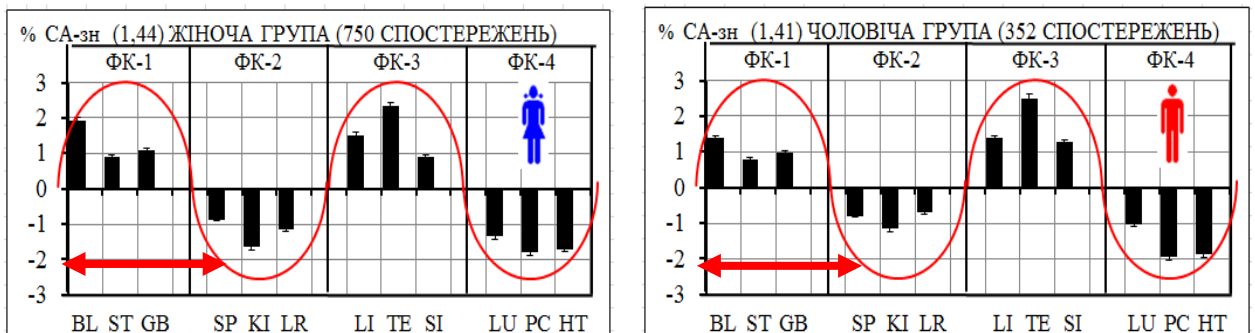


Fig.12

Taking into account biophysical mechanisms of functional pathogenesis of vegetative disorders, let us observe one again vegetative profiles (VP), from the point of their identity in female and male groups (fig.13).

At the same time the following should be noted. Development of sympathetic orientation conditions growth of activity of **BL** and oppression of **LR**, during the relative neutrality of **SP**. Parasympathetic orientation, on the contrary, conditions growth of activity of **SP** and neutral reactions of **BL** and **LR**.

Analogical dependency is observed also in the male group. Here the development of sympathetic orientation also conditions the growth of **BL** activity and oppression of **LR** activity, during a relative neutrality of **SP**.

Parasympathetic orientation, on the contrary, conditions growth of **SP** activity and neutral reactions of **BL** and **LR**.

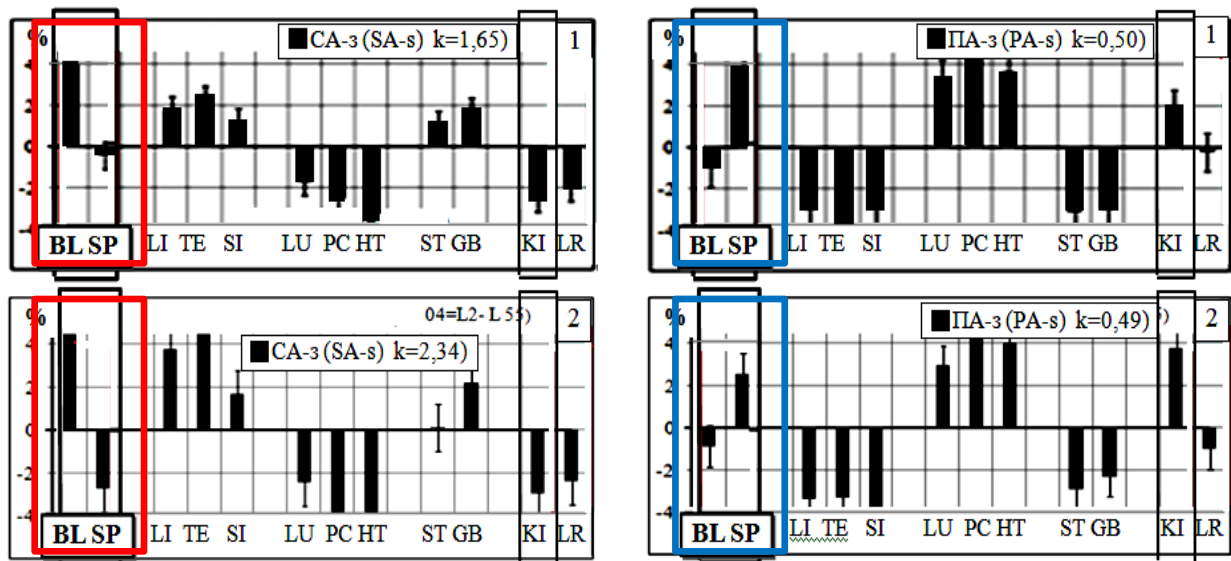


Fig.13 Vegetative profiles of SA-e and PA-e in female (1) and male (2) group.

We draw your attention, that during total identity of vegetative profiles, we found two (depending on k) specific features: paradoxical reactions of SP-BL (FC-1) in female group and LR in both groups under observation (fig.14).

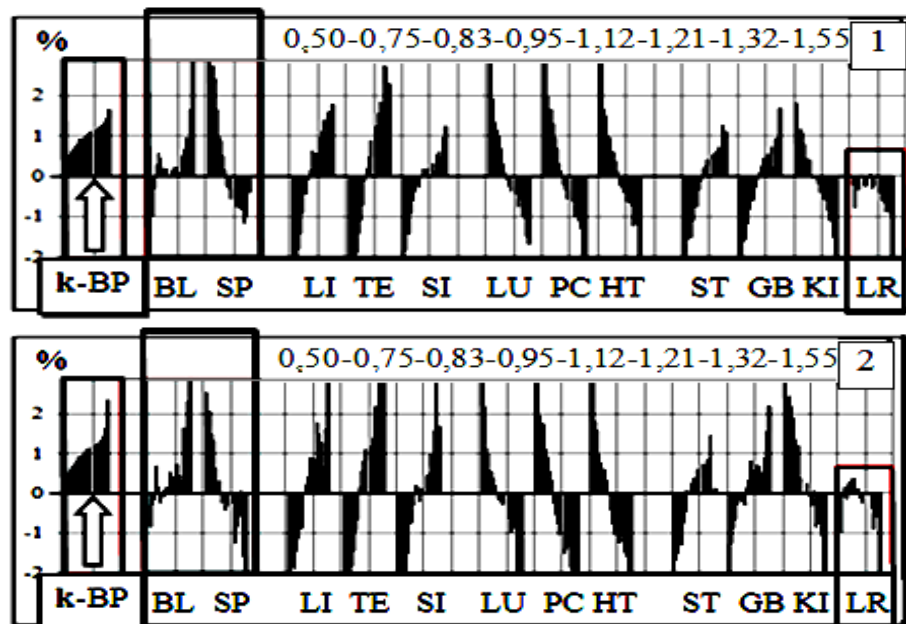


Fig.14 Analogical systemic dependency in female (1) and male (2) groups during growing dynamics of k-VE.

3. FUNCTIONAL-VEGETATIVE LAWS

The discovered dependencies of the basic vegetative indexes on the growing activity of separate YANG-YIN systems, and the functional analogy of YANG-YIN syndromes with sympathetic and parasympathetic activity, have conditioned the discovery of functional-vegetative Laws.

THE FIRST FUNCTIONAL-VEGETATIVE LAW (PHENOMENON OF VEGETATIVE COEFFICIENTS): *Coefficient of vegetative equilibrium (k-VE) appears as an objective integral index of the correlation between sympathetic and parasympathetic activity of vegetative nervous system (VNS) (fig.15).*

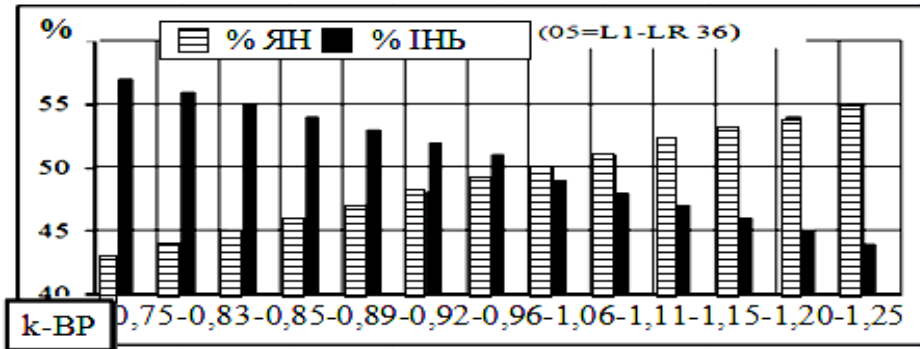


Fig. 15 Vegetative coefficients and appropriate zones of vegetative equilibrium

At the same time:

- 1) The Law is valid for vegetative disorders with the prevalence of sympathetic and parasympathetic activity;
- 2) the key characteristic is the state of the total activity (excitation, or oppression) in the zone “higher than the functional norm”.

THE SECOND FUNCTIONAL-VEGETATIVE LAW (PHENOMENON OF VEGETATIVE PENDULUM): *At informational level the dynamic stability of vegetative homeostasis is controlled by the first and second functional complexes (BL-SP). Its daily activity depends on the phase of the Moon and is the “vegetative pendulum” (maintains a specific biorhythm by even and odd hours; fig.16).*

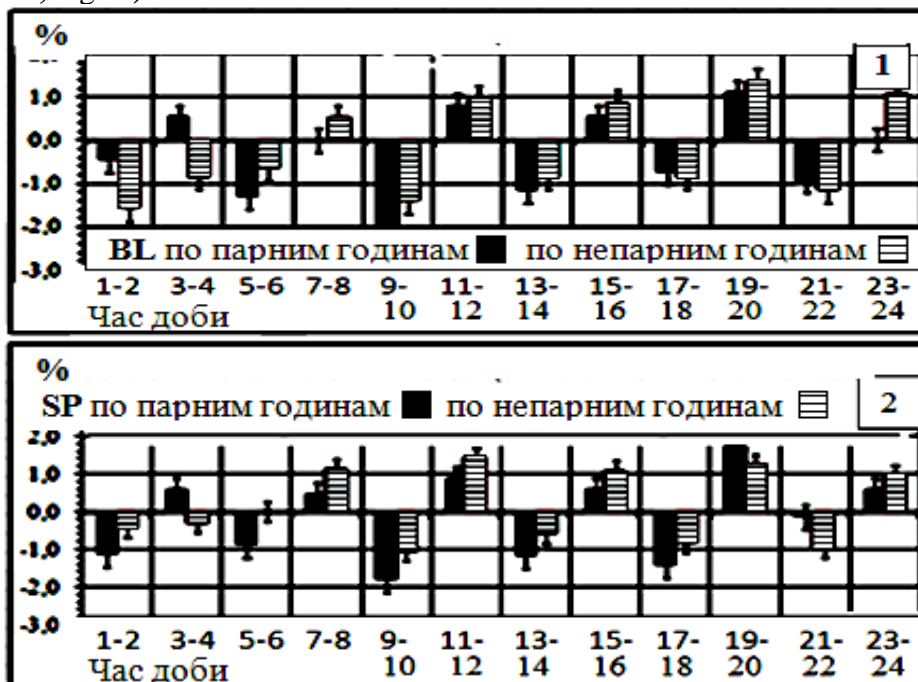


Fig.16 Phenomenon of daily “vegetative pendulum” at even and odd hours [BL (1)-SP (2)] during the phase of Full Moon.

THE THIRD FUNCTIONAL-VEGETATIVE LAW (PHENOMENON OF VEGETATIVE PACEMAKER): *The asynchronous activity of BL-SP forms various levels of functional-vegetative disorders. At the same time, sympathetic orientation of vegetative homeo-stasis forms excessive excitation of BL (1), and parasympathetic – SP (2);* fig. 17.

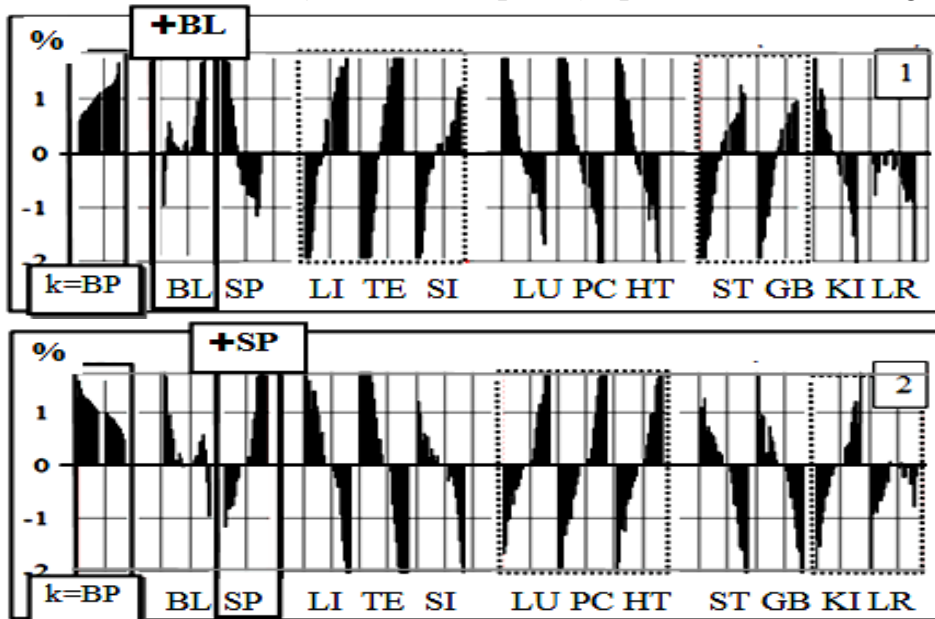


Fig. 17 Sympathetic orientation during excitation of BL (1) and parasympathetic during excitation of SP (2).

THE FOURTH FUNCTIONAL-VEGETATIVE LAW (PHENOMENON OF VEGETATIVE PROFILES): *Activity of separate functional complexes during the prevalence of sympathetic or parasympathetic activity is diametrically opposite and depends on asynchronicity of BL-SP (FC-1). Their vegetative profiles point to the biophysical basis of functional-vegetative pathology* (fig.18).

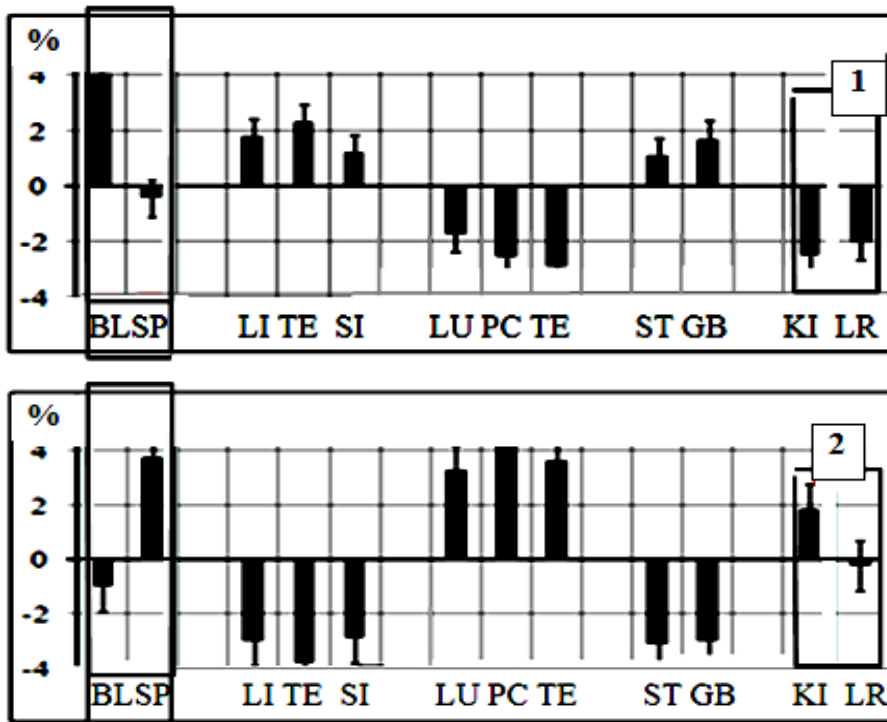


Fig.18 Opposition of systemic vegetative profiles during sympathetic (1) and parasympathetic (2) activity.

THE FIFTH FUNCTIONAL-VEGETATIVE LAW (PHENOMENON OF THE TOTAL YANG-YIN ACTIVITY): *Under conditions of vegetative equilibrium, the total activity of excitation of YANG (SA) systems is compensated by the total oppression of the activity of YIN (PA)*

systems, and vice versa. Disbalance, higher than the zone of functional norm, point to the development of the appropriate functional-vegetative pathology (fig.19).

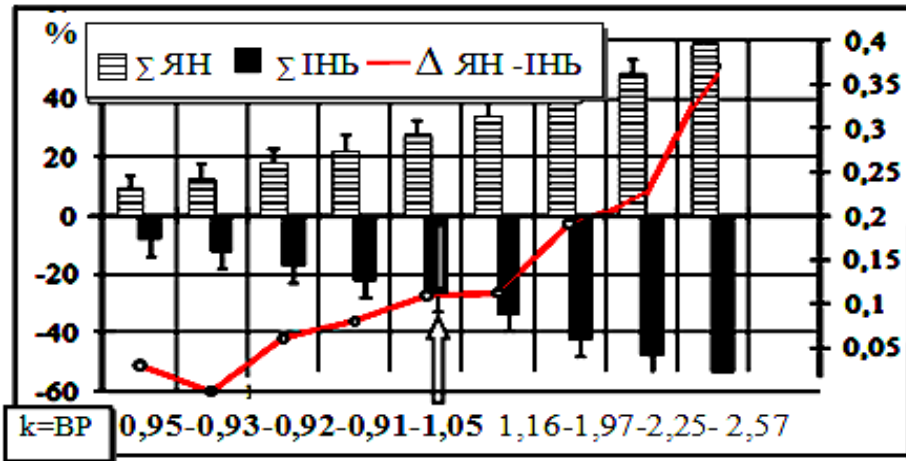


Fig.19 Phenomenon of functional-vegetative equilibrium.

THE SIXTH FUNCTIONAL-VEGETATIVE LAW (VEGETATIVE ACTIVITY OF YANG-YIN SYNDROMES): *Total activity of YANG systems conditions sympathetic orientation of functional-vegetative homeostasis (total activity of YIN systems - parasympathetic). At the same time, coefficients of vegetative equilibrium (k-VE) appear as integral indexes of correlation between sympathetic (YANG) and parasympathetic (YIN) activity (fig.20).*

As it is seen from the graph, the change in the correlation of the total excitation between YANG and YIN groups conditions the growth of the values of vegetative coefficients from 0,56 to 2,14. Their dynamics reflects the change of functional-vegetative homeostasis from significant prevalence of parasympathetic activity to significant prevalence of sympathetic activity.

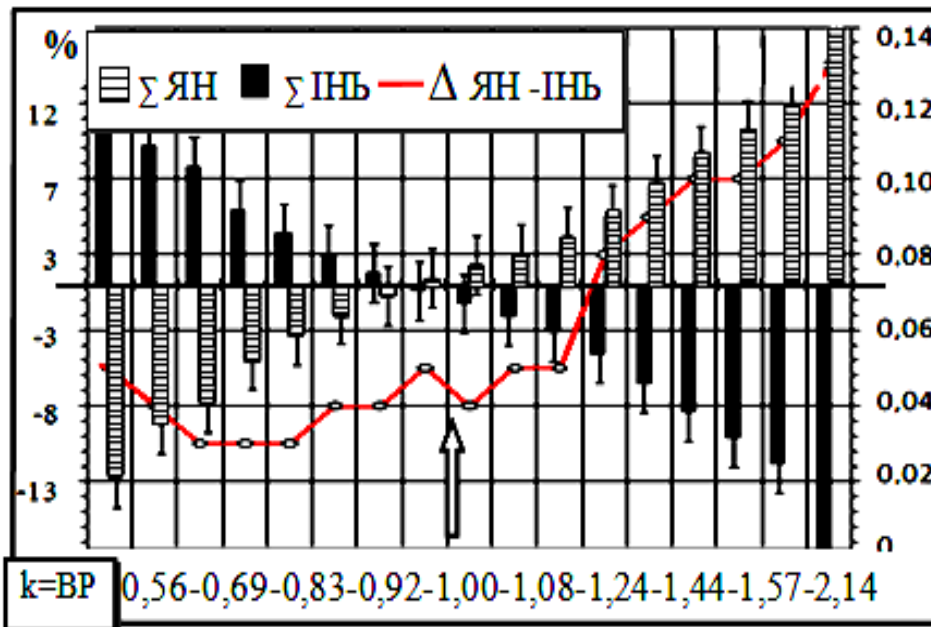


Fig.20 Vegetative activity of functional YANG-YIN syndromes.

The discovered regularities directly point to the vegetative essence of the previously unknown human functional system and require a specific explanation. Let us try to define it...

“Human functional-vegetative system – is a biophysical complex, which, possessing no organic basis, is subordinated to cosmophysical rhythms and on informational level controls the dynamic stability of vegetative-adaptive homeostasis”.

Additionally, we understand that this definition may not be perfect. Nevertheless, the Time will make it clear!

NOW WE HAVE REASONS FOR THE UNAMBIGUOUS CONCLUSION:

1)Traditional *Acupuncture* therapy has a direct relation to functional-vegetative homeostasis.

2)Traditional acupuncture channels are specific systems of functional-vegetative information.

3)Conception *YIN-YANG* syndromes is comparable with the understanding of parasympathetic and sympathetic activity of VNS.

4)All other hypotheses about the value of the Eastern acupuncture are groundless. The latter requires urgent correction of the appropriate educational programs...

AS FOR THE DISCOVERED “UKRAINIAN PANDORA’S BOX”

To open a Pandora’s box is to make an action with irreversible consequences, which cannot be cancelled...

On the background of contemporary biophysical knowledge, a range of “Eastern acupuncture technologies” are perceived with great caution (see pictures)... It would be interesting to hear “therapeutic knowledge” of their authors and their followers!



ONE SHOULD TREAT A EDLE AS A RELEASED TIGER... !

References

1. Vasilenko A.M. Egorov V.V., Kozko A.A. Komplementarnaya meditsina na puti k pravovomu regulirovaniyu // Refleksoterapiya i komplementarnaya meditsina. – №1(7), 2014. – P.4-24.
2. Vegetativnyie rasstroystva. Klinika, diagnostika, lechenie /Veyn A. M., Voznesenskaya T. G., Vorobeva O. V. [i dr.]; pod red. A. Veyna. – M.: Meditsinskoe informatsionnoe agentsstvo, 2000. – 750 p. – ISBN 5-89481-066-3
3. Gerber R. Vibratsionnaya terapiya // M., Sofiya, Gelios, 2001.-592p. – ISBN 5-220-00451-4
4. Dubrovin Denis Aleksandrovich. Trudnyie voprosy klassicheskoy kitayskoy meditsiny (traktat Nantszin) : monografiya / D. A. Dubrovin. – L., Asta Pres, 1991, 223 p. – ISBN 5-85-962-001-02
5. Igloukalyivanie (perevod s vetnamskogo). : monografiya / pod obschey redaktsiey Hoang Bao Tyao, La Kuang Niep. – M., Meditsina, 1988. – 672 p. – ISBN 5-225-00299-4
6. Makats V. G., Makats D. V., Makats E. F., Makats Dm. V. Lektsiya–4 Funktsionalno-vegetativnaya sistema cheloveka kak biofizicheskaya osnova gomeostaza // Medizdat, RF, Refleksoterapevt №8/2011– P.3–23.
7. Makats V. G., Makats D. V., Makats E. F., Makats Dm. V. Lektsiya–5 Biofizicheskaya realnost prognoza vegetativnyih rasstroystv. Oshibki traditsionnoy kitayskoy igloterapii // Medizdat, RF, Refleksoterapevt № 11/2011– P.3–18.
8. Makats V.G., Makats D.V., Makats E.F., Makats Dm.V. Lektsiya–6 Sovremennyye problemy diagnostiki vegetativnogo gomeostaza. Printsipialnaya originalnost novogo funktsionalnogo napravleniya (chast 1) // Medizdat, RF, Refleksoterapevt №12/2011– P.3–21.
9. Makats V., Makats D., Makats D., Makats E. Unknown Chinese acupuncture (reality, errors, problems). Vol. I – Vinnytsia: "Naukova Initsiatyva", Editorial office "Nilan Ltd.", 2016. – 276 ISBN 978-966-2932-80-5