Topical issues of the use of electropunctural diagnostics according to R. Foll
in domestic healthcare
A.A. Fadeev, E.E. Meysers
(NMC "Peresvet", Department of Biomedical Electronics MIREA, Moscow, Russia)

One of the most famous and widely used methods of electropunctural diagnostics is diagnostics according to R. Voll [1], which is successfully used by doctors in more than 60 countries of the world. This method marks the 25th anniversary of its official use in medical practice in our country.

The effectiveness of the method was studied quite fully in a study conducted in 1995–1996 and presented in [2]. The essence of the study was to compare the information content of R. Voll's method and the methods of academic medicine used in practical health care.

Determining the informative value of electropunctural diagnostics is a difficult task, since the usual diagnostic criteria are developed for methods that determine a specific lesion, for example, the use of an ECG to diagnose myocardial infarction. Electro-acupuncture diagnostics allows to determine the functional state of the whole organism. Apparently, it is methodologically incorrect to define the diagnostic informativeness of the electropuncture method as a mono-method, taking as a standard any one method of modern diagnostics (for example, computed tomography will have higher rates in the diagnosis of brain tumors). It is more appropriate to use the integrative nature of electropunctural diagnostics, which makes it possible to determine the same complete list of pathologies during one study, as in a comprehensive examination of a patient using conventional methods. The work [3] is devoted to the issues of the formulation and content of the diagnosis adopted within the framework of academic medicine using traditional methods. The use of modern hardware and software systems, such as "Peresvet-Voll" or "IMEDIS-EXPERT", makes it possible to formulate a probabilistic diagnosis in terms of ICD-10, however, these developments only partially remove the problem of integrating the results of traditional and academic medicine.

The work to determine the effectiveness was carried out under the guidance of Ph.D. Yanovskiy O.G. scientific workers of the Research Institute of TML of the Ministry of Health of the Russian Federation on the basis of the clinical city hospital №23 in Moscow named after Medsantrud. Over 500 patients were examined. According to the protocol, the studies were closed, controlled, with the participation of observers, which at that time fully met the requirements of evidence-based medicine. The results of diagnostics according to R. Voll, carried out by qualified doctors-operators, were compared with the diagnoses obtained in the inpatient regime of the hospital. As a result of the study, the following data were obtained. Complete coincidence of diagnoses was found in 44% of patients, partial - in 22% of patients. In 34% of patients, the clinical diagnosis and electropuncture conclusion did not coincide according to the accepted criteria.

Thus, in 66% of cases, with the help of electropunctural examination, it is possible to make a diagnosis, for which a clinical and paraclinical examination is necessary.

From the standpoint of modern ideas about the method, it becomes clear that the study carried out had pre-underestimated results, since a reduced set of diagnostic data was used. This approach made it possible to significantly save the examination time for one patient, simplify further statistical processing of the results and, obviously, was a compromise solution.

Further studies using generally accepted diagnostic criteria showed that the sensitivity of R. Voll's method, defined as the ratio of the number of truly positive results to the total number of patients, is 72.9%, and the specificity, defined as the ratio of the number of truly negative results to the number of patients without disease, is 36.1%. The highest sensitivity of R. Voll's method was revealed in diseases of the pancreas. The highest specificity of R. Voll's method was revealed in diseases of the small intestine

- 50%, the lowest - in diseases of the gallbladder - 21.7%. These results are reflected in the Methodological Recommendations [4], which are the basis for the application of the method on the territory of the Russian Federation.

The obtained results of diagnostic criteria for R. Voll's method are sufficient for a certain range of tasks and are comparable with the results of modern high-tech diagnostic methods, such as, for example, X-ray, computed and magnetic resonance imaging [5].

The technologies of electrostatic diagnostics, which are officially used in medical practice, including the method of R. Voll, undoubtedly have the potential for further development, both in methodological and technical directions.

Apparently, the most significant error in the measurement of electrical conductivity by R. Voll's method is the dependence of electrical conductivity on the force of pressing the electrode on the measured area. This obvious mistake is often the main counterargument of the opponents of the method. This dependence was described by the authors of the method [6], but later it was shown that the initial understanding of this process requires significant correction [7], significantly affecting the technique of taking indicators.

With multiple studies conducted by the same operator, there is a significant risk of bias due to repeated errors in the conduct of the study and / or interpretation of its results, as well as the technical capabilities of specific equipment. The question of determining the systematic error introduced by the operator was studied in [8]. It has been shown that bias can be identified and corrected. According to the authors, the most promising solution to the problem of the dependence of conductivity on the operator's pressing force is the use of diagnostic probes with force sensors, as well as special software methods.

At the moment in health care has become an urgent issue

economic results of the use of diagnostic methods. The simplest estimates show that the use of R. Voll's method is economically much more profitable than the use of other instrumental methods comparable in terms of diagnostic indicators. The cost of equipment, conditions of use, safety, lack of consumables allows the method to be successfully applied within the framework of not only budgetary but also commercial medicine.

Based on significant practical experience, the place of the method in the national health care system can be determined as follows:

- screening diagnostics, entrance control;
- pre-medical appointment by specialists;
- medical examination;
- operational control of treatment results;
- family medicine.

The special role of diagnostics according to R. Voll, as a method of operational control over the course of homeopathic treatment, is noted in [9].

Based on the analysis of the studies and many years of practical experience in the application of the method of electropunctural diagnostics according to R. Voll, conclusions can be drawn about its sufficient effectiveness and safety when used professionally by trained doctors.

## Bibliography

- 1. Voll R. Elektroacupunktur und Medikamenttestung. Zeitschrift fur Spagyrik, 1960, N 2.
- 2. Yanovskiy O.G. Experience in researching the informativeness of electropuncture diagnostics // Acupuncture. Scientific and practical achievements. Smolensk, 1997. P.207-213.
- 3. Meizerov E.E., Fadeev A.A., Natakhin M.V. Some pressing questions traditional diagnostics, formulation and content of the diagnosis // "Traditional medicine. 2000". Collection of conference materials. Elista, 27-29 Sept. 2000 year
- M .: SPC TM and homeopathy of the Ministry of Health of the Russian Federation, 2000. S. 575-580.
- 4. Yanovsky OG, Karlyev K.M., Koroleva N.A. etc. Opportunities computerized electropunctural diagnostics according to R. Voll's method in therapy with reflexotherapy and homeopathy methods // Methodical recommendations № M 98/232. M .: NII TML MZ RF, 1999 .-- 28 p.
- 5. Philip E. Crewson. A Comparative Analysis of Polygraph with other Screening and Diagnostic Tools // Polygraph, 2003, 32 (2), 57-85
- 6. Voll R. Twenty years of electropunctural diagnostics. Nosodes. Kharkiv, 1993.
- 7. Fadeev A.A., Metaksa E.E., Tsibulsky A.L. Using a force sensor for the assessment of electropunctural measurements // Traditional medicine 2007: Collection of scientific papers of the congress. M., 2007. pp. 375–378.
- 8. Fadeev A.A., Meizerov E.E. Questions of expert evaluation of electropuncture measurements // Abstracts and reports. VII International Conference "Theoretical and Clinical Aspects of the Application of Bioresonance and Multiresonance Therapy".

Part I. 2nd ed. - M .: IMEDIS, 2001. - P.360-366.

9. Yanovsky O.G. Modern technologies of traditional diagnostics in integral assessment of the effectiveness of restorative correction of the state of the body // Health of a healthy person. - M., 2007.

A.A. Fadeev, E.E. Meizerov Topical issues of the application of electropuncture diagnostics according to R. Voll in national health care // "- M .:" IMEDIS ", 2014, v.1 - P.112-117

To favorites