

Some controversial aspects of drug testing and rewriting in
light of clinical pharmacology

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Medical pharmacology deals with the study and therapeutic use of drugs
used to prevent, diagnose and treat diseases.

In the 50s of the XX century, the rapid development of research in all areas
of biology began. As new ideas and new technical advances were introduced,
information was accumulated on the activity of drugs and
the biological substrate of their action - the receptor. In the second half of the last
century, many fundamentally new groups of drugs and new representatives of well-
known groups were discovered. Over the past three decades, there has been a faster
growth in information about the molecular basis of drug action. Currently, the
mechanisms of action of many drugs have been studied, numerous receptors have
been isolated, their structure has been studied and cloning has been performed.

The introduction of scientific principles into daily medical practice continues.
At the same time, patients, unfortunately, still receive a large amount of
inaccurate, incomplete and unscientific information regarding the pharmacological
properties of chemicals. This resulted in
the distribution of a huge amount of expensive, ineffective, and sometimes
harmful, means. From year to year, the uncontrolled consumption of actively
advertised patented drugs by people is increasing. Many sick
ignore medical institutions, preferring to receive treatment
biologically active food additives. Part of the population actually rejects medicine as a
science, not understanding its foundations, and considers all the undesirable effects of
drugs to be the result of medical errors [1].

The rapidly growing alternative medicine industry confuses and confuses
not only the inexperienced consumer, but even healthcare professionals. Many
specialists have very vague and
fragmented ideas about significant advances in the field of medicine.
biological Outstanding discoveries are lost in the ocean of unscrupulous
pseudo theory, advertising sensations and fake
technologies.

Among the really important achievements of biological medicine, one
should especially note the discovery of the phenomenon of electropuncture testing
of medicines, discovered by R. Voll in the course of joint research with M. Glaser-
Türk in 1954. Further studies carried out by R. Voll and F. Kramer with colleagues
laid the foundation for the development of new methods of therapy based on the
individual selection of drugs, determining their optimal dosages and compatibility
with each other without introducing into the human body, and also served as an
incentive for the study of biophysical mechanisms and essence of this
phenomenon [2].

Closely related to this phenomenon technology
energy-informational transfer of medicinal properties of drugs to

various carriers for the purpose of using them instead of the original drugs. A significant contribution to the development of these areas was made by the work of German doctors F. Kramer, F. Werner, F. Morell, H. Schimmel, V. Ludwig, E. Hollisher and Russian researchers - Yu.V. Gotovsky, A.V. Samokhina, O.S. Bravo, L.N. Lupicheva, N.L. Lupicheva, I.L. Blinkova, M.M. Shraibman and many others [2].

Perhaps none of the modern methods of electropuncture diagnostics and therapy has caused such a large number of controversial discussions. An exhaustive review of the literature on these issues is presented in the third edition of A.V. Samokhin and Yu.V. Gotovsky "Practical electropuncture according to the method of R. Voll" (chap. I and II). Within the framework of this message, there is no need to retell the main provisions of this review. I believe that our audience is familiar with them. This report will focus primarily on testing and copying allopathic drugs.

When rewriting the information properties of medicines on the
the substance that perceives it creates an informational imprint
the original medication. In addition to drugs, substances synthesized in the body (for example, hormones) or their analogs can be overwritten. Sometimes it is required to create copies of substances that have no analogues in the body, i.e. are xenobiotics.

Information copies are stored and used in recording on some material medium (water, sugar crumbs, magnetic tapes). The route of administration of information drugs into the body is not of fundamental importance. Often, electronic copies of drugs from a drug selector are included in the circuit of electropuncture, induction or bioresonance therapy, and in this case, the energy-informational effect of the drug on the patient's body is realized through modulated electrical or EM oscillations. So far, there is no complete clarity in understanding the physical mechanisms of information transmission to target organs remote from the point of application and the implementation of therapeutic energy-informational effects in them. With the help of ART it is possible to choose the most effective drugs for the patient, test their dosages, assess the tolerance and compatibility of medications in complex use. However, there are no strict criteria for determining the frequency of administration of overwritten drugs, since the laws of pharmacokinetics do not apply here.

The therapeutic and toxic effects of drugs depend on their transformations in the patient's body. Pharmacokinetics studies the processes of absorption, penetration of drugs, overcoming various barriers, distribution, cumulation effects, metabolism and excretion of metabolites from the body by inactivation or excretion. To

a drug is needed to chemically interact with a receptor that plays a regulatory role in the biological system. Its molecule must have the appropriate size, electrical charge, shape and atomic structure. It is optimal when the shape of the molecule is complementary to the shape of the receptor in the same way as the key is complementary to the lock [1].

Nothing of the sort is observed with energy information
impact. Copies of medicines, organopreparations, toxins and nosodes are not able to enter into chemical reactions with neurotransmitters, hormones and

other biologically active substances. They cannot activate or block receptors, catalyze or inhibit enzymatic reactions. There is no need to evaluate the concentration, clearance and volume of distribution of the imaginary drug.

Despite the encouraging results obtained by R. Voll and his colleagues, most biophysicists and physicians of the 70s were skeptical about the data obtained. A number of controversial aspects of the method continue to fuel this skepticism 30 years later. In practice, until now, some issues of testing and rewriting medicines cannot be solved with the help of tools at the disposal of doctors practicing according to the methods of R. Voll and H. Schimmel.

In addition to the shortcomings noted by A.V. Samokhin and Yu.V. Gotovsky [2], there are other limitations to the possibilities of drug testing, which doctors may not be aware of, and if they know, then they are reluctant to discuss it. The ART method allows you to individualize the process of drug therapy: select an effective medication for a patient, determine its optimal dosage and conduct comprehensive testing for the compatibility of different medications with each other without introducing into the human body. If ART allows you to establish at what stage the drug "worked out" and will no longer bring any benefit to the patient, and determine which drug is best suited for replacement at the next stage of treatment, then it is obvious that if not a doctor, then the body certainly knows which he needs medicine at the moment.

In fact, if electropuncture testing is carried out by the blind (or double-blind) method, it turns out that neither the doctor, nor his diagnostic equipment, nor the patient's body have any idea which of the samples prepared for testing is now entered into the measurement circuit. It means that this or that medicine cannot be identified by our methods of remote testing, if there is no marking on the ampoule, packaging or powder sachet. The process of such blind testing will be more reminiscent of fortune telling on coffee grounds than laboratory research.

It is much more accurate to establish the chemical identity of drugs, for example, by spectroscopic methods of analysis.

You can also easily identify the taste of some simple compounds: sugar, table salt, citric acid, calcium chloride (provided that the person knows that the latter tastes very bitter). The neuroepithelial cells of the taste buds on the surface of the tongue instantly recognize which test tubes contain alcohol and which ones contain water. The receptor signaling system of the acupuncture point reacts to contact with a particular substance by fluctuations in electrical conductivity and electrical capacity at the point being measured (as indicated by the "drop of the arrow" on the scale of the device).

Several doctors I know who, at my request, agreed to test 10-20 ampoules with water and the same number of ampoules with alcohol, as well as bags with crystalline substances: citric acid, sugar, NaCl and MgSO salts by the EAF method⁴. Having decomposed the samples into homogeneous groups (10 sachets of each substance), they did not go beyond the boundaries of the values of the random distribution. Perhaps, the uncertainty in the solution of this problem will not disappear even when a method for obtaining a complete

electromagnetic "portrait" of the drug, for the simple reason that the effects of testing the system of acupuncture meridians are not always reproducible. True, in the practice of drug testing, it is extremely rare to identify a drug.

It should be noted on this point that it is not a good idea to taste medicines. Many substances can be equally salty, sour, sweet, or bitter. Many will have a specific taste that is unlike anything else, while others will be simply poisonous.

There is also a more serious problem. The real obstacle to testing and copying drugs is created by the so-called excipients that are part of the tablets and their coatings. All kinds of fillers, substances that improve taste, etc. Here are just a few of them: starch, flour, methylcellulose, microcrystalline cellulose, gelatin, polyvinylpyrrolidone, talc, beeswax, petrolatum oil, citric acid, sugar, lactose monohydrate, sodium crosscarmellose, magnesium stearate, magnesium carbonate basic, sodium lauryl, macrogon 6000, aerosil, as well as all kinds of dyes and flavors. After absorption and distribution of the drug in the body, the active ligands will independently determine with which receptors they should enter into chemical interaction. In this matter, they are helped by extracellular, transmembrane and cellular signaling mechanisms, as well as secondary chemical cytoplasmic messengers. The ballast auxiliary components of the tablet usually do not show any pharmacological activity or are not absorbed from the intestine at all. Information prints of such tablets will contain the frequency spectra of all components in a very wide range with the superposition of some spectra on others, which will inevitably create noise interference. In this case, one can only hope that the regulatory system of the patient's body will automatically tune into resonance at the desired therapeutic frequency, and filter out the noises. If we draw an analogy with radio receivers, the idea seems to be quite achievable. Many people know from personal experience that this does not happen at the level of the organism, as well as secondary chemical cytoplasmic mediators. The ballast auxiliary components of the tablet usually do not show any pharmacological activity or are not absorbed from the intestine at all. Information prints of such tablets will contain the frequency spectra of all components in a very wide range with the superposition of some spectra on others, which will inevitably create noise interference. In this case, one can only hope that the regulatory system of the patient's body will automatically tune into resonance at the desired therapeutic frequency, and filter out the noises. If we draw an analogy with radio receivers, the idea seems to be quite achievable. Many people know from personal experience that this does not happen at the level of the organism, as well as secondary chemical cytoplasmic mediators. The ballast auxiliary components of the tablet usually do not show any pharmacological activity or are not absorbed from the intestine at all. Information prints of such tablets will contain the frequency spectra of all components in a very wide range with the superposition of some spectra on others, which will inevitably create noise interference. In this case, one can only hope that the regulatory system of the patient's body will automatically tune into resonance at the desired therapeutic frequency, and filter out the noises. If we draw an analogy with radio receivers, the idea seems to be quite achievable. Many people know from personal experience that this does not happen at the level of the organism. The ballast auxiliary components of the tablet usually do not show any pharmacological activity or are not absorbed from the intestine at all. Information prints of such tablets will contain the frequency spectra of all components in a very wide range with the superposition of some spectra on others, which will inevitably create noise interference. In this case, one can only hope that the regulatory system of the patient's body will automatically tune into resonance at the desired therapeutic frequency, and filter out the noises. If we draw an analogy with radio receivers, the idea seems to be quite achievable. Many people know from personal experience that this does not happen at the level of the organism. The ballast auxiliary components of the tablet usually do not show any pharmacological activity or are not absorbed from the intestine at all. Information prints of such tablets will contain the frequency spectra of all components in a very wide range with the superposition of some spectra on others, which will inevitably create noise interference. In this case, one can only hope that the regulatory system of the patient's body will automatically tune into resonance at the desired therapeutic frequency, and filter out the noises. If we draw an analogy with radio receivers, the idea seems to be quite achievable. Many people know from personal experience that this does not happen at the level of the organism. Information prints of such tablets

From what has been said, it would be logical to conclude that for testing and copying drugs, they must be kept in their pure form - in ampoules, powders or recorded on magnetic media in an analog or digital way. For many drugs that are not available in ampoules, it will not be possible to obtain a reference sample. Manufacturing firms usually stand guard over their know-how.

But what about testing multivitamin preparations and dietary supplements containing 10–20 or more plant alkaloids and vitamins, plus about a dozen more microelements? Some distribution companies equipped with OBERON diagnostic agro-industrial complex found an interesting solution: regardless of the diagnostic results, the computer program recommends to the patient a set of those food additives that are available in their warehouse. Maintenance of such a device does not require any special training of personnel at all. It is enough to put headphones on the head of a potential buyer, put a checkmark in front of the organs of interest to the client and start the diagnostic process by pressing a button. This is one of

examples that form specialists and simply normally thinking people, a negative attitude towards non-traditional diagnostic methods.

Fortunately, such methods become obsolete over time, and really effective methods of biological and alternative medicine, based on the latest or time-tested old discoveries, are gradually gaining more and more popularity among the population. Patients may not have any idea about quantum sulfur conductivity, nuclear magnetic resonance, the Doppler effect, the physics of X-rays, laser radiation, the mechanisms of biological action of ultra-weak intensities and ultra-low doses used in bioresonance therapy and homeopathy, but understanding and trust appear when a positive result is seen. ...

Most authors explain the phenomena of electropuncture drug testing hypothesis about electromagnetic (EM) the nature of the interaction of radiation from objects of animate and inanimate (medicines) nature. In this case, it is assumed that various drugs have their own spectra of characteristic EM oscillations, which, if they coincide with the frequency of electromagnetic oscillations of a biological object (organs, tissues, cells, receptors, etc.), cause a resonant response, which is expressed in a change in electrical parameters biologically active points (BAP).

Different medicines have different spectra of characteristic EM vibrations [2].

Based on experimental studies carried out over the past 60 years, it is possible to put forward some important assumptions regarding the mechanisms of distant regulation of homeostasis in the human the body.

The phenomena of the distant effect of medications, for electrical characteristics of BAPs, are due to the interaction characteristic electromagnetic fields (EMF) predominantly with water molecules. In water at room temperature, about 400 individual molecules combine to form a cluster to form large molecules. In chemistry, such compounds are called associated or polymer-linked molecules. Even at the level of individual water molecules, the phenomenon of generation of a wide spectrum of frequency oscillations takes place. Water clusters are characterized by an even wider spectrum (in the kilo- and megahertz ranges). With an actual cluster size of about 400 interconnected molecules, an infinite number of configurations of these figures are possible. Due to this, the memory capacity of water is very large and is not inferior to that of carriers with magnetic domain structures.

Wolfgang Ludwig, in the course of experiments on drug testing, found that the natural frequencies of the drug in the form of ultra-weak external EMFs in the low-frequency part of the spectrum are communicated to the patient through a hand electrode, causing directional excitation of synchronous oscillations in water clusters of various body fluids. The ability of water to transfer and store information has been experimentally proven [3].

Biologically active points on the human body are united by a system of acupuncture meridians, which are part of an open energy system with a highly organized network structure. This biological system is represented in vertebrates by the main substance, orextracellular

matrix (VKM), which occupies a significant volume of connective tissue and permeates the extracellular spaces of the whole organism. The main substance is a complex complex of various macromolecules that form a supporting frame of cells and tissues. But this is not just an inert mass of shock-absorbing "packing material". The ECM plays the role of the "main regulatory system" in the body, responsible for the activation or inhibition of metabolic, hormonal-humoral and immune processes, correction of pathological conditions in the body and elimination of undesirable effects of xenobiotics in organs and tissues. Specific regulatory mechanisms of the basic substance trigger intercellular interactions of both short and long range and provide complex interactions of the organism with the environment. The ECM elements are ideally adapted to perform the functions of receiving, transmitting and processing information that is not associated with a specific energy carrier [5].

The structure of the matrix resembles a knitted fabric, consisting of high-polymer carbohydrates and proteins (proteoglycans-glycosaminoglycans), structural proteins (collagen, elastin) and binding glycoproteins (fibronectin, laminin, etc.). Due to the high density of the negative charge of glycosaminoglycans, they firmly bind cations. Even at low concentrations, they are capable of binding water. When combined with water, proteoglycan / glycosaminoglycan complexes can form a mobile and elastic gel-like substance that occupies a large volume. Collagen fibers embedded in the gel matrix provide strength. The protein fibronectin ensures cell attachment to the extracellular matrix, and laminin to the basement membrane. Proteoglycans and structural glycoproteins form a molecular lattice, through which the entire metabolism passes from capillaries to cells and back. Molecules, starting with a certain size and a certain charge, are not allowed through by the lattice. The size of the filter openings is determined by the concentration of proteoglycans in the corresponding tissue compartment, their molecular weight, as well as electrolytes and the resulting pH value. Thus, they guarantee isoiony, isoosmia and isotony of the matrix.

As a result, a stable electrostatic equilibrium is created, and the matrix reacts to any external signals with fluctuations in the potential, which ensures a fast orderly conduction and distribution of information within the framework of homeostasis regulation. The basis of these intercellular interactions of close and long-range radii observed in a multicellular organism, most likely, is represented by water-sugar biopolymers of the basic substance, which receive energy stabilization by binding to proteoglycans. The system is energetically open and has the ability to remove the energy of radical reactions released during all metabolic processes. The resulting fluctuations in the energy level can simultaneously spread over the main substance,

In the case of using the "transmitter-receiver" model for remote testing of medicines, the principle of resonance is relevant. If similar atomic groups in the preparation and in the tissues of the body have similar or even

the same resonant characteristics, synchronous fluctuations, induced by external EMF in clusters of liquid crystal water associated with proteoglycans, normalize energy parameters at the measured acupuncture point. When we remove the medication from the hand electrode or test cell, the phase connection between the drug and the structures of the body disappears, the clusters rearrange, and the electrical parameters of the point return to their previous values [3].

Healing effects from the use of information copies allopathic drugs are associated with a prolonged resonant effect on the main substance of the target organ. Most likely, cluster complexes structured by a specific spectrum of vibrations excite repeated synchronous vibrations and then maintain them in the same cycle. In this case, not only the normalization of the BAP parameters occurs, but also the harmonization of the electrophysiological characteristics of the basic substance, in precise resonance with the energy-informational setting.

Hartmud Heine in 1987 found that under the BAPs he studied, the neurovascular bundles penetrate the fascia and affect the subcutaneous cylinder, which consists of the proteoglycans of the main substance. This cylinder is covered with a denser proteoglycan layer. It is also limited from the outside. In connection with the problem of diagnostics of the main regulatory system (ECM), active contact of a relatively large and concentrated part of the basic substance with the skin epithelium and the external environment is of particular importance.

The discovery of the "Heine cylinder" contributed to the demystification of the system of acupuncture meridians and the scientific approach to their study. If we talk about the diagnosis and study of the state of the body, then the acupuncture point can be considered "a window into the main regulatory system." This confirms the importance of the diagnostic capabilities of measurements in the area of points, and the need to study the functional relationships between acupuncture points and organs.

According to Heine's description, we are talking about a multifunctional point organ:

1. From a mechanical point of view, the acupuncture point is viscoelastic, shock and pressure absorbing system.
2. Proteoglycan network, lying next to the surface of the organ (BAP), has the ability to vibrate and, therefore, can respond to electrical, electromagnetic and magnetic stimuli.
3. A network consisting of electrolytic molecular fibers, is, from a biophysical point of view, a charge storage, i.e. battery. The surrounding denser layer can be considered a capacitor due to its insulating capacity.
4. Distinguished by pronounced electrolability, proteoglycans react to any irritation by depolarization and can transmit signals to distant areas of the extracellular matrix in the form of a chain reaction. Thus, the continuity of the transmission of primary information from a point to distant parts of the body is ensured [4].

However, electrical lability and the ability to vibrate the structures of the main system (including BAP) also determine their sensitivity to

electrostatic and electromagnetic influences of the environment, such as: static fields, air electric charges and electromagnetic pulse fields. It is also possible to identify the "Heine cylinder" as the organ of perception of electromagnetic and magnetic fields. This property may be able to explain the reasons for increased meteosensitivity and hypersensitivity individual of people. To minimum fluctuations in the geomagnetic field.

Over the past decade, a large amount of actual material testifying to the successful application of bioresonance methods of diagnosis and treatment in medical practice both as independent methods and in combination with pharmacotherapy. Diseases can change parameters such as absorption and elimination of drugs from the body, and tissue sensitivity to drugs. And this prevents the achievement of the maximum therapeutic effect in the target organ. The use of vegetative resonance testing with the connection of nosodes,

organ-specific drugs, "electromagnetic copies" of the drugs used allow to measure the value of many physiological variables, as well as to model the effect of the disease on them. A correct assessment of the severity of the pathological process, the patient's adaptation reserves, the identification of possible allergic reactions and drug intolerance allows predict probable complications and make a prognosis. For pharmacologists, the use of the ART method could provide invaluable assistance in choosing the most effective drugs, a rational dosage regimen and in the early recognition of the toxicity of drugs and their metabolites. And what is important, drug testing, measurements and analysis of various biological indices make it possible to monitor these processes over time.

Medical pharmacology with its technical equipment could also help (explain) shed light on many unknown issues of sanogenetic mechanisms of energy-informational medicine. What are mechanisms of activation or inhibition of metabolic, hormonal-humoral and immune processes? How do superweak electromagnetic influences in strictly selective frequency ranges initiate the correction of pathological conditions in the body and the elimination of the undesirable effects of xenobiotics in organs and tissues? How do the mechanisms of distant signaling function in this case, and in what ways is the transmission of information in the body realized? What is the effect of BRT on the synthesis and release of neurotransmitters into the synaptic cleft? What is the impact on voltage-gated ion channels? Is there an activation of receptor or mediator-dependent channels? And many other questions.

Detailed electrophysiological studies of the effect of drugs on both voltage-gated and mediator-gated channels have become much more accessible due to the invention of the "patch-clamp" method, which allows recording currents through individual channels. To map the localization of various mediators, associated enzyme systems and their receptors, histochemical, immunological, and radioisotope methods are widely used. For drug screening, many biological tests are used at the molecular, cellular, organ and organism levels [1].

Of course, we are not talking here about economically backward Russia. High technologies are absent here, the scientific potential continues to decline steadily, which is the main obstacle to the discovery and introduction of new drugs. In recent years, our pharmaceutical industry has resumed the production of some original domestic drugs that have not been on the market since the beginning of the 90s. This happens only thanks to financial support and technical assistance from Western pharmaceutical companies.

Why, then, the same firms are not engaged in scientific research of the discovered phenomena of the distant effect of drugs? The fact is that the creation, testing and successful implementation of each new drug is a complex and expensive production process that takes many years. Even at the final stage, the time from the filing of a patent application to the marketing authorization of a new drug can be more than 5 years. The costs for each drug range from \$ 100 million to \$ 350 million or more. In most countries, such research is carried out with financial support from the government. No government will take the risk of financing projects not directly related to drug production. On the other hand, pharmaceutical officials, fearing competition, will do their best to hinder the development and implementation of non-drug therapies. A characteristic confirmation of this trend is the influential pharmaceutical lobby, which constantly inhibits the consideration and adoption of relevant decisions in the German Bundestag and health authorities.

According to the testimony of the late Dr. H. Schimmel, who visited Moscow in 2002, in Germany, in the homeland of S. Hahnemann, H.-H. Reckeweg, A. Pischinger, R. Voll, F. the Morel and others (see above), followers of new successors of the discussed advanced directions here, still sectarians from remain in the position medicine, however, quite highly paid sectarians. Russian medicine presents a striking contrast in this respect. Undoubtedly, the key role here was played by the founders of the Soviet school of reflexology, who have trained more than one generation of highly qualified specialists since the beginning of the 60s. Thanks to this, bioresonance medicine has received a new birth in Russia and a huge number of supporters, not only among doctors, but also among leaders and organizers of healthcare. At the risk of offending someone, unintentionally ignoring it, I will not list the names of many of our outstanding representatives in passing. This is probably a topic for a separate historical review.

The Ministry of Health of Russia allowed the use in medical practice of electropuncture diagnostics according to the Voll method (No. 98/232), electropuncture vegetative resonance test (No. 99/96), auricular diagnostics in clinical reflexology (No. 00/73), bioresonance therapy (No. 00/74).

All this inspires confidence that no corporate interests can stop the advancement of science along the path of a holistic understanding of the relationships in the body.

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