

Quantum Approach to Allergic Pathology

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Abstract

Allergy, despite its stereotyped symptomatic manifestations, continues to pose significant etiological, pathophysiological, and therapeutic challenges. In the interface between the body and the environment, the respiratory pathway is particularly stressed from an allergological perspective. Under the relationship between energy and matter signed by Einstein, it is possible to approach patients suffering from allergies with an Electraceutical (1) administration in a quantum modality.

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Introduction

Biochemical / Molecular Aspects of Allergy

Defining allergy requires the adoption of clinical, biochemical, and molecular biology criteria, as well as biophysical aspects as will be seen. The interplay between genomics and epigenomics is reconfirmed in this pathology. The significance of familial predisposition is strong; however, the epigenetic data carries considerable weight, even in homozygous twins. In fact, the mechanisms of immunological tolerance, or their loss, are highly complex and evoke molecular biology dynamics that manifest in 2 branches (2). The functional modulation between the Th1 and Th2 systems is more explicit than ever (3); for simplicity, a vast body of literature uses colorful cell illustrations and vectors to imply proactive or depressive influences. Despite this quest for clarity, it can be observed that often the same substances, with reference to interleukins, evoke opposing regulatory mechanisms. In such complexity, only the philosophy of science enables us to stay the course, allowing us not to get lost in the study of hypnotic scenarios, clearly an expression of fractal mathematics (4). Indeed, it involves examining an infinite agglomeration of interleukins expressed by complex genomic and epigenomic systems, reflecting the self-similarity of fractals (5). Science philosopher E. Laszlo describes this complexity using the term "holons" coined by philosopher A. Koestler (6). Even in extreme schematization, it is useful in these lines to assert the concept of an overexpressed Th2 system as a promoter of allergy. In allergies, a functional prevalence of T Helper 2 (Th2) lymphocytes over T Helper 1 (Th1) lymphocytes has been described, with the consequent interleukin profile correlation. The phenomenological repercussions of a switch between the TH2 and TH1 systems, with the latter being underexpressed in allergies and consequently compromising

crucial immunological functions, are contextualized in shock organs, including the upper airways. This functional focus creates possible correlations in a cross-talking supported by reasons not exclusively of anatomical contiguity. Hence, periodic and/or perennial Rhinitis with or without sinus implications (7), allergic oculo-rhinitis (8), rhino-bronchial syndromes (9); to these are added, as derived from clinical findings, translational pathologies between the nasal lymphoid system NALT and that of the intestinal mucosa GALT (10) as contextualizations of MALT (11). The attempt to systematize manifestations within an apparatus logic, as the exclusive and marginal site of allergic inflammation, encounters very apparent limitations that call for clarifications which break the confines of a rigid, protocol-driven methodology. Take, for instance, chronic cytological rhinitis(12), which despite the negativity of allergological tests, may present symptoms perfectly superimposable on allergic conditions. In such cases, amounting to roughly 20 percent of a representative statistical 'pie' in Italy that describes the totality of vasomotor rhinitis, the remaining portion is almost entirely sustained by allergic forms (14).

Moreover, in these previously defined pseudoallergic forms, the same cells are implicated, as can be readily demonstrated with nasal cytology; the chemotaxis mechanisms of eosinophils and/or mast cells remain unknown. Once recruited into the nasal mucosa, sinus, conjunctiva, or lower airway lining, they can induce a state of immune inflammation, potentially leading to nasal polyps and asthma(15). These irksome examples, for those who wish to confine clinical practice within the bounds of protocol medicine, bolster the reasoning and conduct of a sound clinical approach that never dismisses facts merely to honor the precision of rationalistic preconceptions. For instance, among patients with rhinobronchial syndrome (16) and nasal polyposis, not identifiable with allergological diagnostic practices, there are patients suffering from Widal's syndrome(17) with Samter's triad, who rapidly worsen, sometimes dramatically, upon taking acetylsalicylate, demonstrating leukotriene and prostaglandin mechanisms involved, regardless of a rational framework; there is the evidence of eosinophilia in the blood and in the pathological tissue of nasal polyps; to complicate matters, the influences of heavy metals and antioxidants(18).

An additional piece of data from transplant medicine: one would expect that an allergic asthmatic lung, when transplanted into a non-allergic patient, would conform to the new organism, but this has not been the case! The immune system maintains its pathological, federalistic setup (Robbins and Contran, Pathologic Anatomy).

It should also be added to foster critical thinking, which awakens from a dogmatic slumber as Kant would say, that neurogenic mechanisms also underlie the pathophysiology of the rhinobronchial syndrome, such as the well-known rhinobronchial reflex.

The larynx, as a critical region of the upper airway at the boundary with the lower airway, embodies immense complexity, enabling it to oversee swallowing, respiration, and uniquely human acquired phonation. Indeed, the larynx is involved in allergic manifestations, but its pathology often presents significant challenges in differential diagnosis with reflux-related disease. For 80% of cases, the reflux is acidic, but in the remaining instances, it is alkaline; in such cases, the patient does not experience heartburn but sustains mucosal damage at a trigger point at the juncture of the respiratory and digestive systems by an agent such as pepsin, which can even be phagocytosed, causing damage to intracellular structures, including the Golgi apparatus. Consequently, the same symptomatology arises: cough, throat clearing, sensation of a lump in the throat, exacerbation of already compromised respiratory function in cases of COPD and asthma. It is noteworthy that the larynx embryologically emancipates itself from the gastroenteric system. It is easy to comprehend how a connection between these two systems is

never completely resolved, both in health and disease; evidence of this is the translational pathology determined by the intestinal immune system, as occurs in Leaky Gut Syndrome(19), where pathological permeability allows the passage of xenobiotics through the intestinal epithelium that can sustain a metaflammation with possible immunoinflammation of the respiratory mucosa(20). In these instances, a chronic non-allergic non-infectious cytological rhinitis often sustained by neutrophil granulocytes, defined in nasal cytology as NARNE, is frequently observed(21).

It is commonly encountered in otolaryngology practice that the elimination of certain foods promptly resolves immune-inflammation in the respiratory tract mucosa (22). Though briefly mentioned, reference must be made to borderline allergic pathology, such as that which occurs in allergic rhino-conjunctivitis, predominantly but not exclusively seasonal. It should be noted that sometimes, in perfect analogy with chronic cytological rhinitis, immune-inflammation in the conjunctiva sustained by eosinophils/mast cells can occur, not co-opted locally by allergic chemotaxis, as happens in keratoconjunctivitis of Vernal, with unknown etiology, typical of the pediatric age(23). In addition to what has been stated, which describes exceedingly complex clinical situations, fortunately rarely severe, it must be said that forms of chronic cytological rhinitis can coexist with frank allergic forms; this rarer circumstance can justify the persistence of allergological symptoms outside the period of exposure to antigens confirmed with specific tests (24).

As evidence of the complexities of inter-system relationships, it should be mentioned that, during the exclusive period of pollen exposure, adherence to dietary elimination of cross-reactive foods attenuates the inflammatory impact of inhaled allergens on the respiratory mucosa (25); naturally, the converse is also true. Such good conduct, if adhered to, reduces serous rhinorrhea, sneezing, nasal congestion, and consequently decreases the reliance on medications that inherently possess side effects and/or contraindications. The common antihistamine, besides crossing the blood-brain barrier, interacts with voltage-dependent calcium channels, potentially causing tachyarrhythmias often as a result of modifications in the QT interval (25). In drafting these introductory notes regarding allergic phenomena in the otorhinolaryngologic district, we introduce the issues of the external auditory canals (26). Here, the cutaneous tissue is represented by a mere few square centimeters of surface area, yet dense with allergological complications. Herein, dermatitis, often chronic and frequently related to intestinal tolerance/allergy issues, develops (27). It should be mentioned in passing, that justifying how an allergen can induce an inflammatory reaction through mechanisms not strictly allergological, requires a grasp of quantum physics; this subject will be addressed later, albeit in broad strokes. Revisiting the topic of non-infectious dermatitis of the external auditory canals, as it invariably presents bilaterally. Reviewing a case series from a hospital clinic with an annual throughput of 6,000 consultations, there was a predominance of contact dermatitis forms in women who used hair dye products, predominantly nickel sulfate allergies. To atypical form of nickel allergy, a systematic form called SNAS is associated with gastrointestinal symptoms to rhinitis and asthma (28). There were a few but significant cases, due to the severity of the skin symptoms which were not manageable even with corticosteroid otic drops, during celiac disease (28).

This focus on the mechanisms of translation quickly leads to recognizing a need for an expansion concerning the approaches to allergic pathology of the organ system, both on a phenomenological level and a pathophysiological level, impacting diagnostic and therapeutic procedures. In the future, it is foreseeable that the positions of privilege held by all those medical figures who dissect the entirety of the organism, quite literally to pieces, will fall. These specialists, in a derogatory sense, who may have

won the initial battle against physicians with an internal medicine/biophysical approach, will soon find themselves ousted by new therapeutic figures, who heal thanks to a deeper understanding of the causes underlying the pathology. Harmful agents and interactions with the vital network cannot be reduced to fixed patterns but may take on diverse forms within the dynamic complexity at the interface between genomics and epigenomics, all within an ever-evolving anthropogenic context. The struggle, an expression of a dialectic that unfolds in the epistemological journey of the philosophy of science, is so fierce that some deny the existence of certain harmful agents in the name of rationalistic principles upheld by a contingent scientism. Victory, achieving a synthesis between these two opposing trends, will go to those who offer the best outcomes with the most favourable side effects, at lower costs, with proposals for more innovative preventative practices.

For educational purposes, the key aspects underpinning allergic pathology will be outlined in broad strokes. In its interaction with the environment, the immune system's TH2 branch can be considered at the forefront. The allergen, which constitutes the *casus belli*, engages the immune system in four modes... There are various types of allergens (Nickel, Cobalt, Potassium Dichromate, Titanium (29,30,31,32). The modes and underlying cells have been well characterized, while their mechanisms of interaction are not fully known or are at least subject to ongoing updates. It is well understood that the allergic *modus operandi* unfolds into 4 types: Type 1 hypersensitivity reactions (anaphylactoid); Type 2 reactions (cytotoxic); Type 3 (immune complex-mediated); Type 4 (cell-mediated). Every individual engages their somatic system in a temporospatially diversified manner, with therapeutic efforts that can range from dramatic (Type 1) to the onset of true chronic diseases, which are often underestimated in self-treatment. It is intuitive to understand how an interaction between a plant antigen and specific IgE can trigger the release of chemical mediators, including histamine, with clear phenomenological consequences: itching of the nasal mucosa, rhinopharynx, pharynx, and conjunctiva, sneezing, edematous congestion of the otorhinolaryngological districts with respiratory disorders, particularly critical are the edematous phenomena affecting the soft palate and the relaxed portions of the larynx, up to situations requiring surgical intervention (rhinosinusoidal polyposis). We are compelled to assert that it appears exceedingly intuitive to consider the mechanisms by which the quantitative surmounting occurs in the uncontrolled release of inflammatory cytokines, termed a cytokine storm, which can precipitate anaphylactic shock. Examples can be derived from clinical practice, justifying how a minuscule amount of allergens, in weight terms, such as hazelnut cream in a pastry or the inhalation of a very limited number of cow's milk protein molecules in a dairy, can, in a matter of moments, trigger the drama of anaphylactic shock, necessitates invoking and acknowledging additional reactions not solely orchestrated on a biochemical level.

For educational purposes, a list of commonly used and second-line pharmacological treatments is provided: antihistamines, leukotriene inhibitors, corticosteroids, anti-receptor antibodies (omalizumab); specific desensitizing vaccine therapy, desirable but not practicable in all forms (30).

The Biophysical Aspect of Allergies

Without intending to give a lesson in physics, until the early 1900s the mass of any element was defined as a quantity tied to the weight of the element itself. However, in the early years of the century, discoveries made by numerous physicists of the time, many of whom were Nobel laureates, with Albert Einstein being a prime example, demonstrated that mass was a form of energy and that energy could be seen as a form of mass; this energy was represented as an electromagnetic wave whose distinguishing feature is its frequency (the number of oscillations per unit of time). The background to each

theorization on the subject, but also of every therapeutic interaction, is supported by simple considerations. There is a correlation between a biophysical code and e molecular code, e fast experimentally confirmed by C. Smith , who evoked allergic phenomena by appropriate electromagnetic waves (37) .

FIGURE 1-2

Under this law, all allergens can also be represented as an electromagnetic wave characterised by a

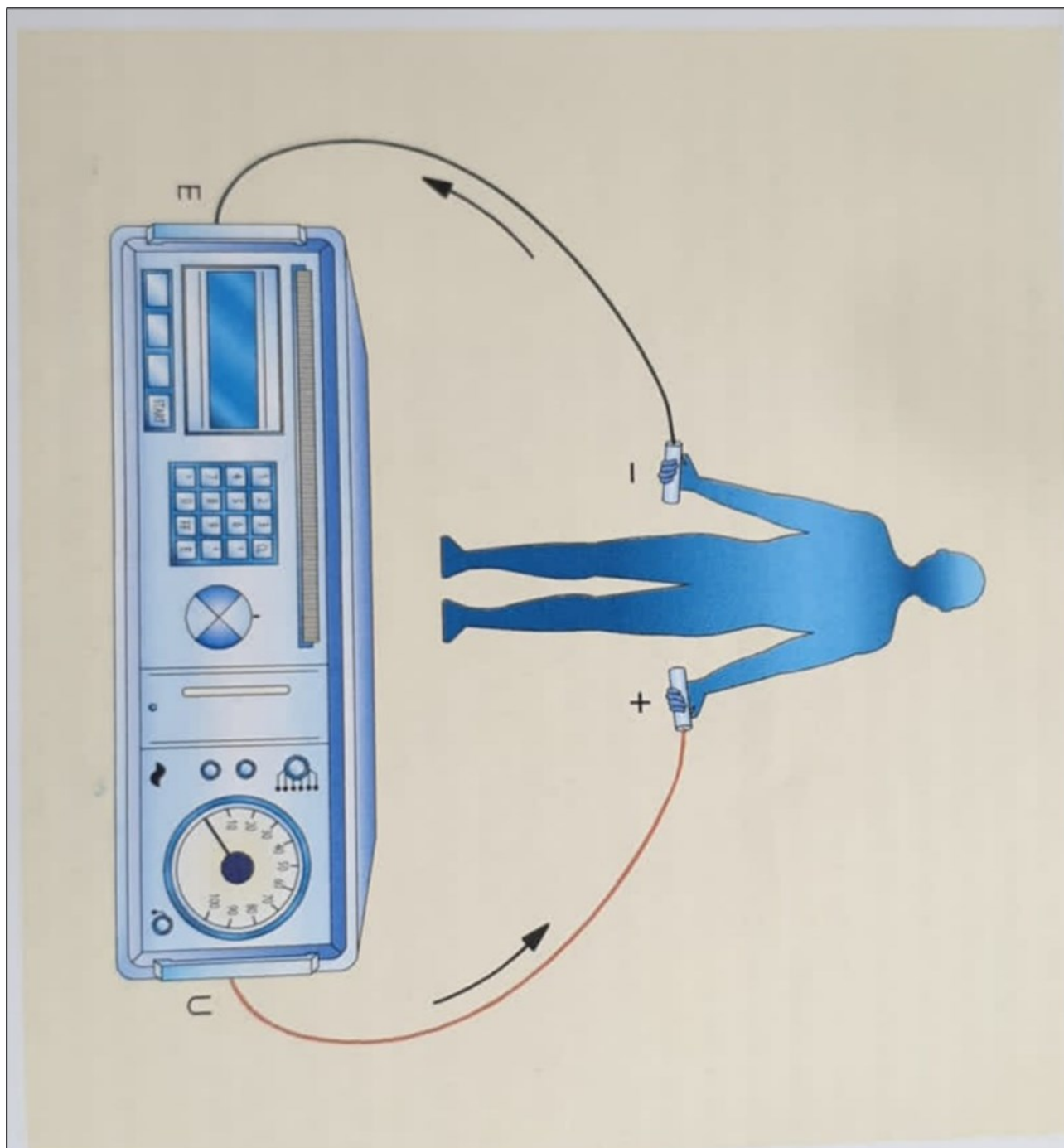


Foto 1

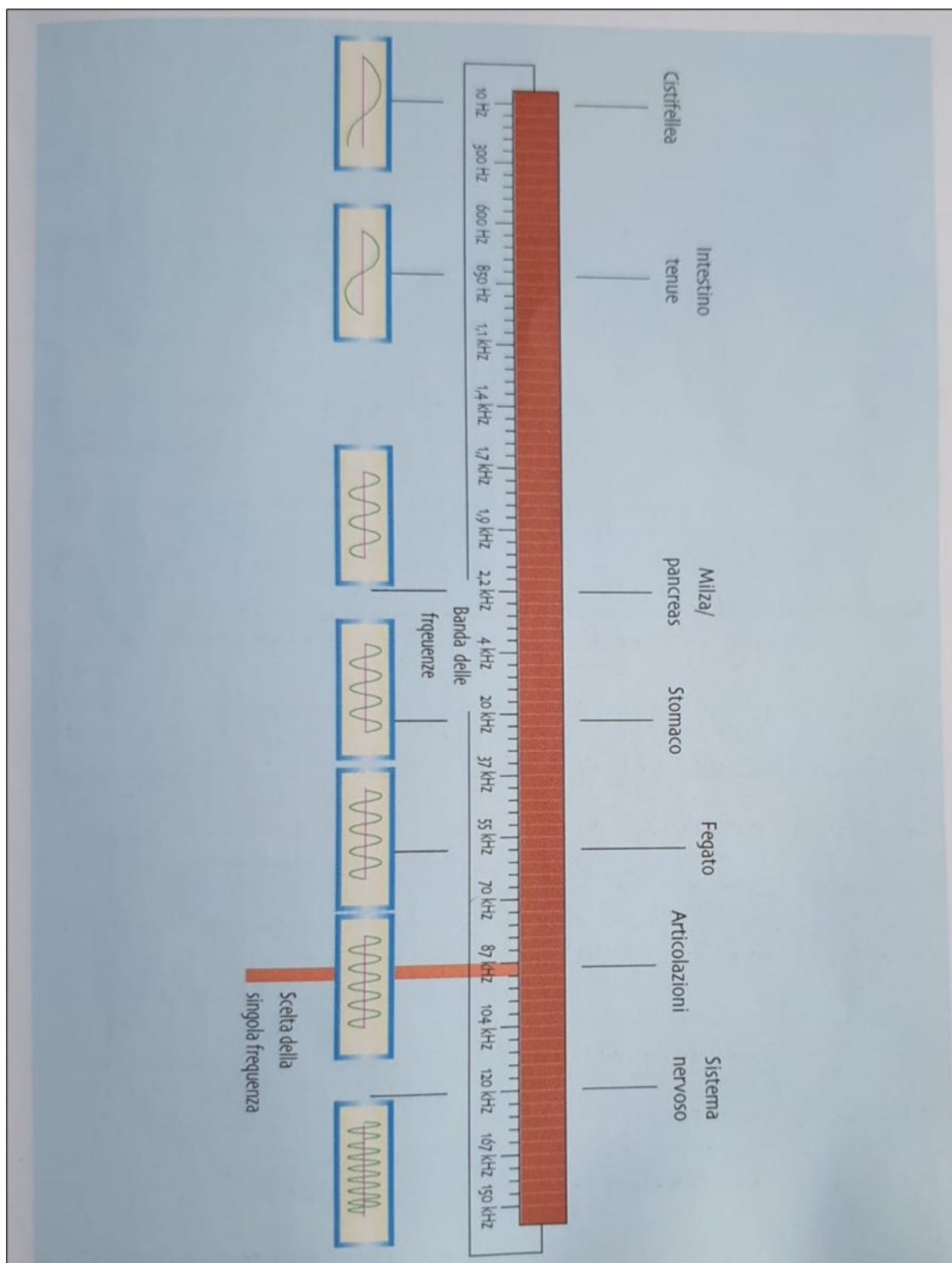


Foto 2

distinct frequency specific to them. In light of the considerations made, the organs present in our body, including all our cells, can be represented by electromagnetic waves each with a specific frequency. The sum of all the signals emitted by our organs constitutes the electromagnetic spectrum of the human body, and this spectrum continuously varies over time.

FIGURE 3-4-5

Should there be multiple peaks within the frequency spectrum that do not vary over time, this should be

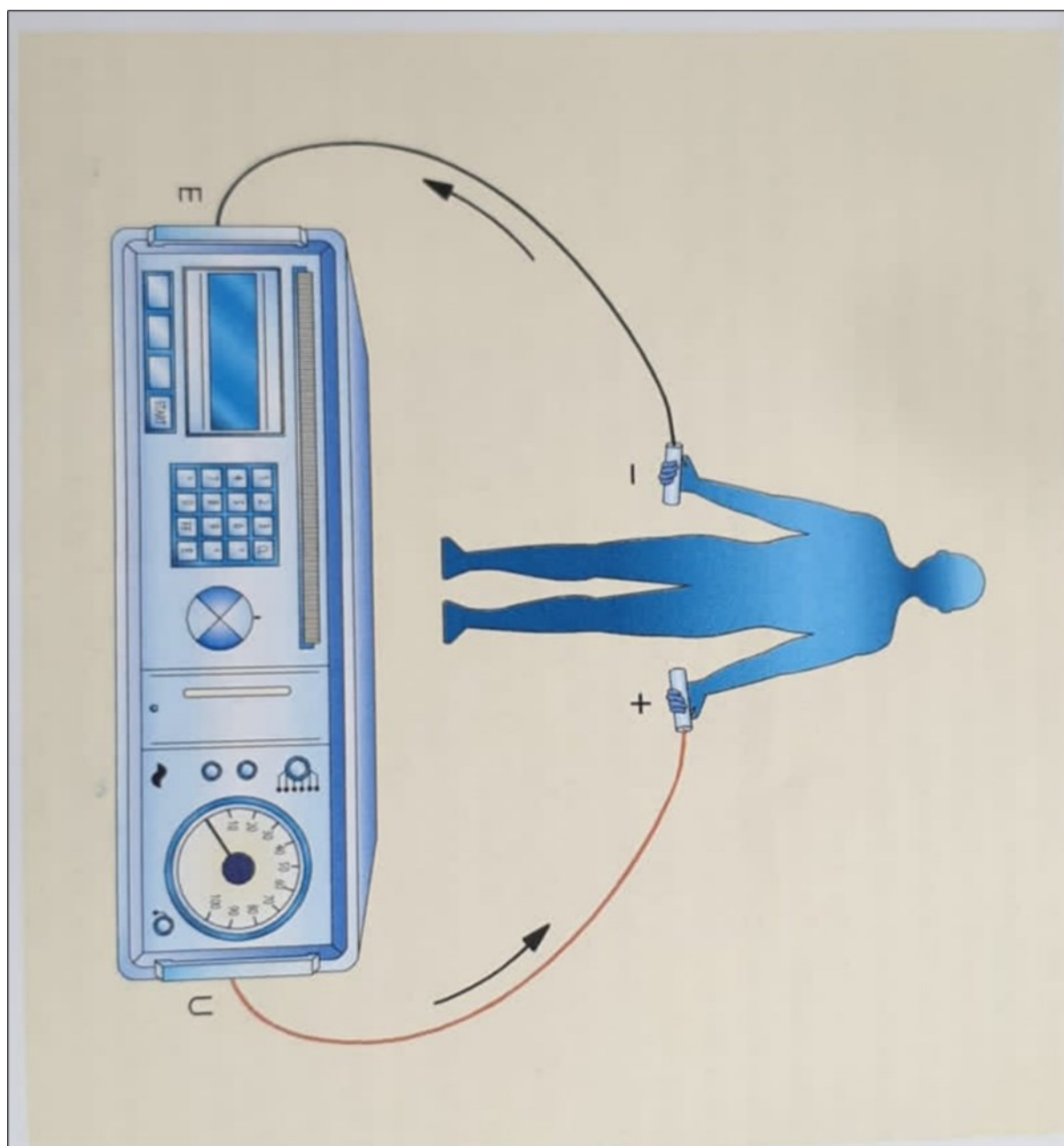


Foto 3

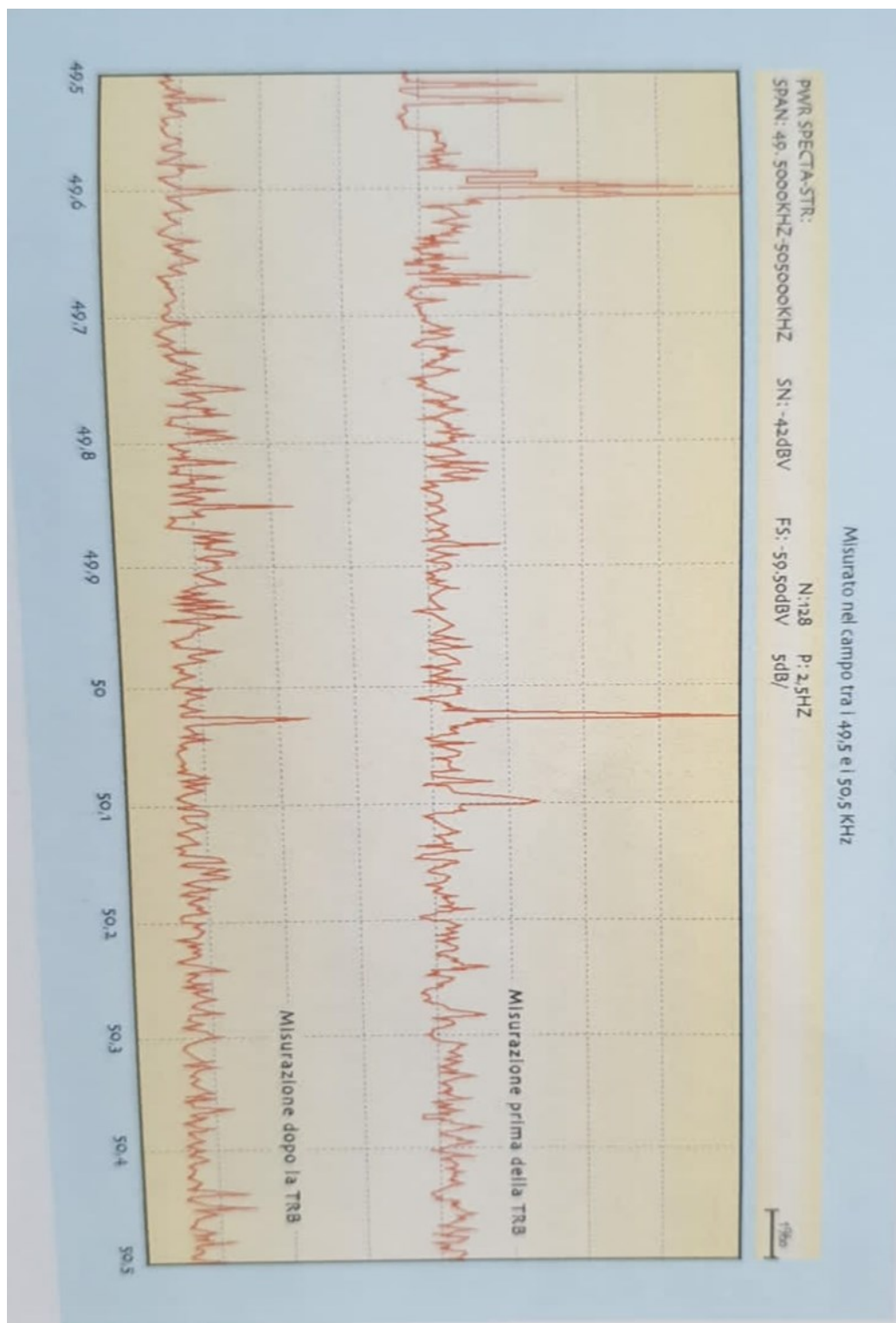


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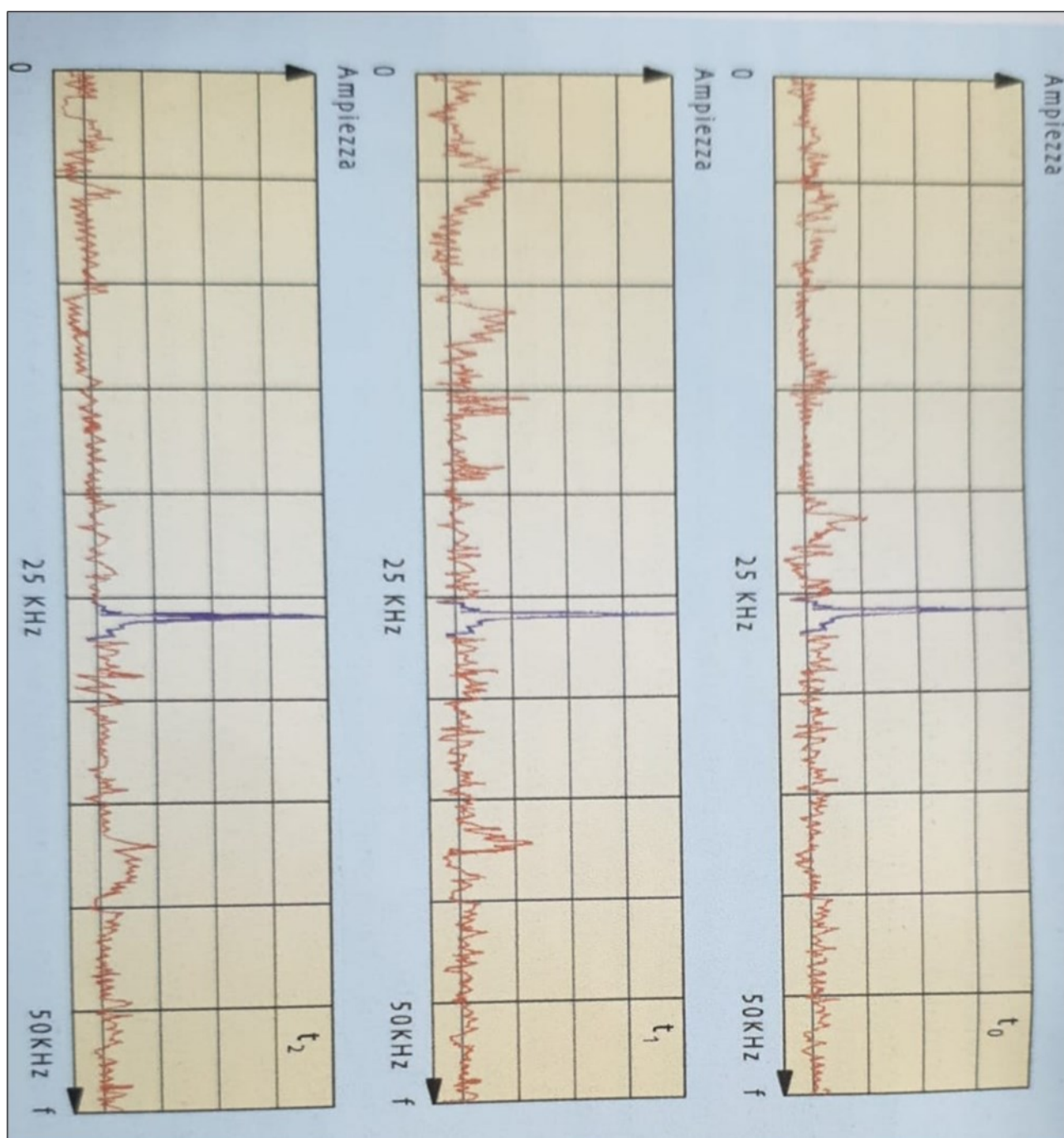


Foto 5

interpreted as an indication of one or more pathologies, including that of allergy. For instance, by analysing the spectrum we can determine that at the frequency corresponding to the peak or peaks, there will be a specific allergen. Its intensity can be ascertained from the graph by evaluating the amplitude and the respective frequencies f_1 and f_2 .

FIGURE 6

The biophysical therapy that is implemented involves connecting the patient, via specific electrodes, to

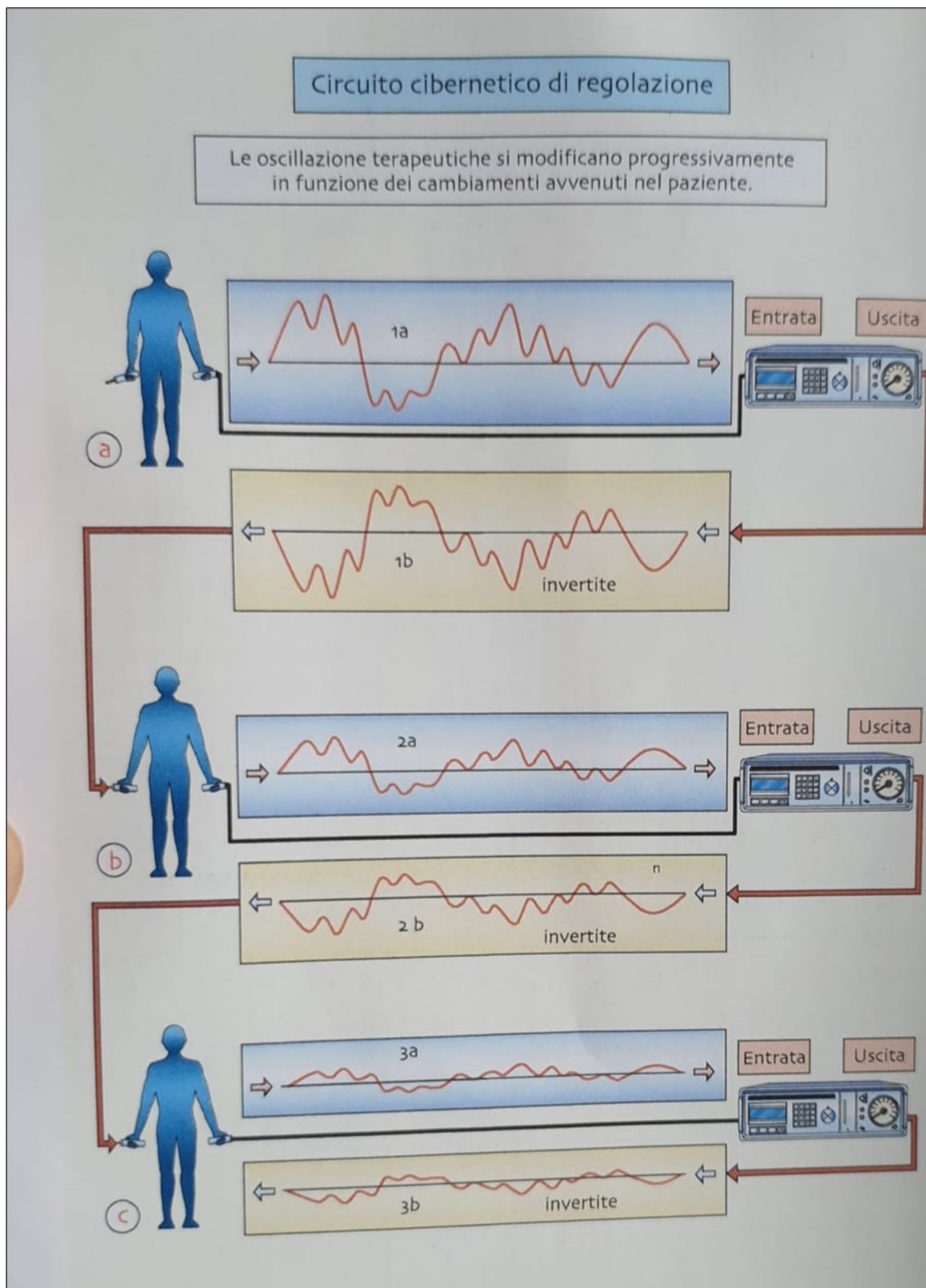


Foto 6

an apparatus capable of generating and transmitting signals which, being in phase opposition, or inverted, can nullify the pathology's peak or peaks.

FIGURE 7

If the human body behaved like a mathematical system, the reaction would be that: to a signal with

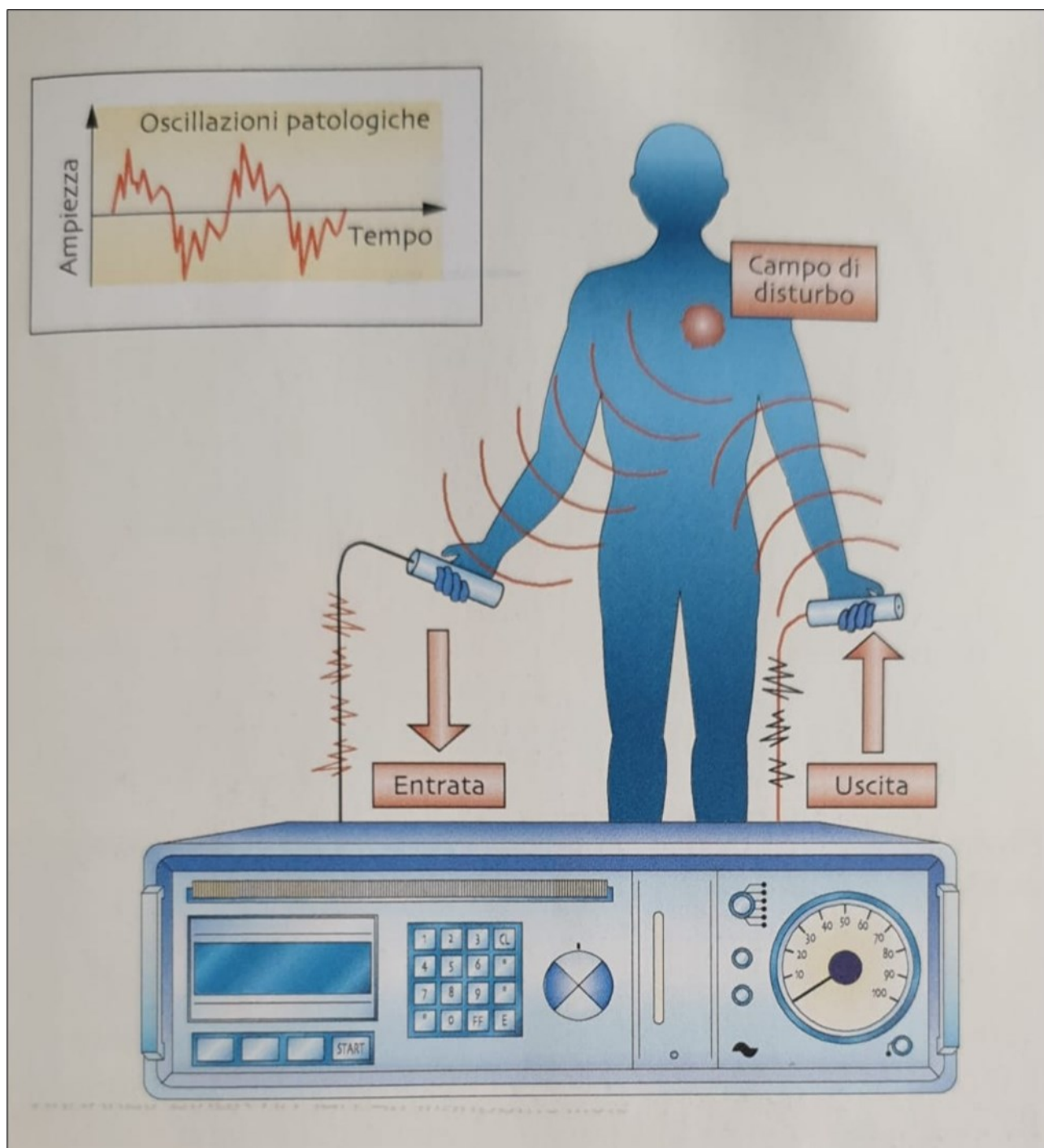


Foto 7

frequency f_1 and an intensity of, for example, "5", if we were to send an opposing or inverted signal at the same frequency f_1 with intensity "-5", there would be cancellation of the signal itself. However, the human body does not behave in this way, so the result might be an improvement achieved through a reduction in amplitude to, for instance, "a4", and we would need to continue therapy by sending a counter signal of "-4" and so on until the complete disappearance of the disturbance signal.

This approach must then be applied to the second peak at frequency f_2 and so forth, in the event that other allergenic pathology peaks are present. It is necessary to treat the patient beginning with the peak having the greatest amplitude.

The Bioresonance system, which operates through the generation of inverted signals across various frequencies, is a secure system that does not produce any side effects, and consequently, it is applicable to all patients, regardless of age.

Materials and Methods

Study Period: January 2023 to June 2023 **Experimental Device:** BICOM OPTIMA Twenty patients were recruited, including 2 children aged 4 to 12 years; 18 adults aged 18 and over. The patient population was affected by allergies to pollen, dust mites, and animal fur. Patient data were consistently collected before the commencement of each treatment session, which involved 3 to 10 sessions, with 2 follow-up sessions after 1 or 2 months. Each session was conducted at intervals of 7-10 days. Each patient was informed about the protection of personal and medical data, and current data protection regulations were applied. The initial session included taking a medical history, assessing symptoms, and their impact on quality of life. Allergies, although often considered less significant illnesses, significantly affect quality of life, emotional well-being, and sleep, and are predicted to become endemic in the future, as the population is forced to live in an increasingly polluted environment. An energetic test, an examination for any scars, geopathic stress, or electromagnetic burden was conducted. Scars create disturbance fields that can interfere with our therapeutic action via the Bicom device and thus need to be neutralised. It is important to consider not only cutaneous scars but also tonsillectomies, dental surgeries, and visceral scars.

The patient was informed about the bioresonance therapy and the procedures of the treatments, including the timing and checks during the therapy. The number of treatment sessions depended on the severity of the allergy, which is reflected in a greater amplitude of the pathological peaks found in the diagnostic scan. If multiple allergies are present, they must be treated individually, starting with the most significant, the fundamental one. Often, by addressing the fundamental allergy, the others diminish considerably and frequently do not require treatment.

List of Patients Who Participated in the Study

M.D. 1968 M

P.M. 1983 M

L.P. 1956 F

L.G. 1978 M

L.B. 1966 M

C.P. 1969 F

S.P. 1940 M
S.P.P. 1975 M
B.R. 1964 F
P.M. 1982 F
C.A. 1960 M
C.G. 2012 M
P.M. 2008 M
M.E. 1990 F
D.L.M.R. 1962 F
B.S. 1982 F
A.G. 2012 F
B.O. 1970 M.
A.F. 2017 M
B.A.Q. 1966 F

The treatment was conducted using the following sequence of programmes: 1st and 2nd session – basic therapy

Scar treatment, if required

Geopathy treatment, if required

Detoxification of excretory organs (kidneys and liver)

Enhancement of the immune system

Subsequent Sessions

Basic therapy

Immune system enhancement

Fortification of the excretory organs

Allergy therapy with reverse frequencies

For the allergy therapy, both the provided vials containing the allergen and the allergen itself (e.g., dust, animal hair) were used. In cases of unknown allergens, therapy with reverse frequencies was administered using the patient's urine, which is known to contain all allergens. Here, an additional detoxification programme is coupled with the therapy. During each allergy therapy session, patients are advised to drink plenty of water to assist the excretory organs and for the necessary detoxification process.

Analysis of the Results

The outcome of this study demonstrates that bioresonance therapy yields an initial amelioration of symptoms, a steady decrease in the use of antihistamine and corticosteroid medications, culminating in a resolution of the issue with significant enhancement of quality of life. No adverse effects were observed during the treatment. In particular, no initial worsening of symptoms was found, as a prelude to efficacy,

as can instead found in patients undergoing thermal therapy for upper airway problems. The analogy between crenotherapy, structured in a scientific manner by Prof L. Pietrantoni, full professor of otolaryngology at the University of Milan, and our therapy is a cause for strong reflection, both are conveyed by water. From consolidated experience, we can state that the memory of our treatment remains in the patients checked in subsequent years. Our experience is that the rare cases of recurrence of symptoms in a periodic allergic rhinitis, on subsequent analysis, were due to the eclipsing capacity of the primary disturbance peak. Due to its size, this had disturbed the detection of further peaks, defined as phasic sub structures, located near the frequency scale.

We have never observed differences in response to treatments, between children and adults.

Conclusions

We believe that the application of bioresonance (38) in disorders related to the hyperexpression of the TH2 system is highly appropriate. Considering that in this field, specific allergens are identified in only about 80% of cases when examined with epicutaneous (prick test) or blood tests (RAST), bioresonance (39) allows for the detection and subsequent neutralization of the etiological element in urine. Such patients who often, but not always, respond to topically administered corticosteroids may require, due to the severity of the asthmatic symptoms and/or the recurrent presence of nasal polyps, the use of therapy with monoclonal antibodies. The competition with more sophisticated therapeutic methods is based not only on the absence of side effects but also on the intrinsic economic cost of the therapies. We intend to conduct a subsequent study, supported by preliminary case series data, which will enable us to subject all those patients suffering from cytological chronic rhinitis, frequently associated with similar immune-inflammation of the lower airways causing asthma, to bioresonance. These patients will be selected from those with symptoms indicative of allergy but negative specialist assessment; they will be accompanied by nasal cytology to confirm NARES, NARMA, or mixed forms of chronic cytological rhinitis as NARESMA, and by spirometry.

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