

Glycocalix Quantum-Biophysical-Semeiotic Evaluation plays a Central Role in Demonstration of Water Memory-Information.

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**“Nothing rests;
everything moves;
everything vibrates.”**

The Kybalion.

Abstract.

In the paper, the Author emphasises the central role of glycocalyx bedside evaluation in clinical demonstration of Water Memory-Information. In health, such a paramount structure of cell life is related to a normal n-DNA and mit-DNA, while whatever cell abnormality, independent of its nature, bring about glycocalyx dysfunction, bedside assessed with the aid of Quantum Biophysical Semeiotics.

Swallowing the water of a glass, energized with extremely high energy frequency, gathered by Cem Tech from whatever diseased tissue, brings about to normalization of glycocalyx function in that biological system, whereas possible clinical phenomenology disappears, after one days.

Introduction.

In science history we may find a lot of lasting controversies, whose successive solutions, proved through a proper method, resulted to be of epochal importance. According to K. Jasper's statement, the method importance in knowledge process is fundamental (*Das Wesen der Wissenschaft*). One of such distressing events is Benveniste's water memory.

“Benveniste's controversial career, also highlighted the tricky issue of how to deal with research on the fringes of science, a question with which Nature itself became intimately entangled” (1).

Argument of large discussion, water memory was till 1 July 2011, a conjecture (2-4).

As a matter of fact, nobody has demonstrated that water is capable of retaining a memory (I like to add also INFORMATION, underlining the “active” aspect of energised water) of substances once dissolved in it to arbitrary dilution.

The concept was notoriously proposed by Jacques Benveniste to explain the *purported* therapeutic powers of homeopathic remedies, which are prepared by diluting solutions to such a high degree that not even a single molecule of the original substance remains in most final preparations. Benveniste sought to prove this basic tenet of homeopathy by conducting an experiment to be published independently of homeopathic interests in a major journal.

In my opinion, it was a greatest error, perhaps due to lacking necessary knowledge of quantum physics, nobody paid attention to Benveniste' words: Biomolecules communicate with their receptor molecules by sending out low-frequency electromagnetic signals, which the receptors pick up like radios tuned to a specific wavelength.

Unfortunately, Jacques Benveniste as well as all other scientists ignored Quantum Biophysical Semeiotics (www.semeioticabiophysica.it , and www.sisbq.org) (2-17).

While some studies, including Benveniste's, have reported such an effect, double-blind replications of the experiments involved have failed to reproduce the results, and the concept is not accepted by the scientific community.

Fortunately, quantum biophysical semeiotic researches, corroborating water memory-information, are easily reproducible, at the condition scientists know this method.

Glycocalyx bedside Evaluation

The refined assessment of cell glycocalyx, described in earlier articles, targeting the medical experts in QBS (5,6,14,17). A description of a simple method is below explained, applicable by those who know at least auscultatory percussion of the stomach (29), shown on QBS website, www.semeioticabiophysica.it ,Technical Page N ° 1.

In health, at rest, supine, with open eyes to minimize the epiphyseal melatonin secretion, microcirculation in every biological system, measured as fluctuations in both upper (vasomotility = small arteries and arterioles, according Hammersen) and lower ureteral reflex (vasomotion = capillaries and post-capillary venules), show the physiological parameter values (29-32) (Fig. 1) .

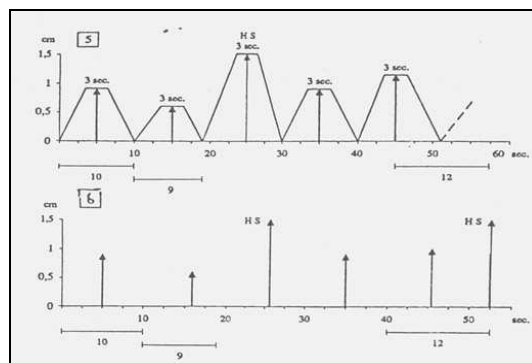


Fig. 1

Normal microcirculation at rest: deterministic chaos in upper ureteral fluctuation, paralleling vasomotility oscillations, is observable; they are unpredictable, stochastic, random, AL+PL+DL = 6 seconds. There are physiological Highest Spikes (Intensity = 1, 5 cm) after 2 normal, intermediate fluctuations

However, only in the healthy individual, the stimulation insulin secretion, as in insulin acute pick secretion test: doctor applies a “intense” pinch at the level of VI dermatome (the skin immediately below costal emi-arch causing "simultaneously" significant increase of both intensity and duration of AL (Ascending Line) + PL (Plateau Line) + DL (Descending Line), demonstrating that the first phase of insulin receptor activation, catalytic in nature, physiologically occurs.

Importantly, physician has to stimulate pancreas trigger-points at the precise moment when the vasomotility wave, arrived at the end of the PL, is going to start the terminal downturn, DL. In this case, we observed a marked "simultaneous" increase in the intensity of the oscillation, whose duration is extended to 8-9 seconds (basal value, NN, = 6 sec.).

On the contrary, in the subject even apparently healthy, but with impairment of glycocalyx due whatever disorder, under the same experimental conditions described above, upper ureteral oscillation increasing latency time is 2-5 sec. in relation to the underlying glycocalyx alteration. The subsequent oscillation shows a not significant increase in intensity, lasting no more than 7 seconds, revealing the altered composition of the cell glycocalyx.

The following clinical experience, easy to apply, corroborates the above mentioned data very easily, giving the doctor not sufficiently expert in SBQ the opportunity to clinically evaluate the activity of the glycocalyx, monitoring it under treatment.

In health, physician evaluates the latency time of the tissue (e.g., skeletal muscle in case of CFS) - gastric aspecific reflex (tissue oxygenation: NN = 8 sec.) and its duration, physiologically more than 3 seconds and less than 4 seconds, corresponding both to the Microcirculatory Functional Reserve and to the fractal dimension, fractal Dimension (12-15, 21-24).

The second evaluation of these parameters is carried out "simultaneously" at the beginning of the insulin acute pick test, and allows to observed in healthy individuals, doubling of latency time (e.g., in our case, NN = 8 seconds) expression of an effective microcirculatory activation, "simultaneous" to the test, referred above.

On the contrary, under the same experimental conditions, in subjects with glycocalyx abnormality, is not possible to reach an optimal oxygenation of the examined biological system due to local disorder.

Interestingly, we must remember the correlation between structure and function of whatever cellular structure and between physiology and pathology. If the glycocalyx reacts physiologically to a stimulus it means that the cellular composition which structured it, for instance, n-DNA and mit-DNA, is normal, allowing the physician to exclude damage of whatever origin (21-23).

Quantum Biophysical Semeiotic Method.

To understand clearly what follow, reader has to know Maturana and Varela's autopoiesis theory (13). In biology, Varela et al. proposed the theory of autopoiesis, useful to understand the connection between organization (in our case, n-DNA e mit-DNA) and structures (glycocalyx) in living systems. An autopoietic system, so as described by Maturana and Varela, is based on a scheme of autopoietic organization through a process of structuring which can lead to different structures, e.g., glycocalyx). The autopoietic organization is conservative and always acts on itself: self-production, self-regulation, self autopoiesis through a continuous process of structuring, generating dissipative structures with non-linear dynamics (13).

There is structural coupling between organization (conservative) and structure (dissipative) to always achieve the autopoiesis. If there was a tendency to disease (or if there is pathology), the organization would always be orientated towards the survival, materializing and engaging compensatory mechanisms to restore groped the simultaneity and synchronicity.

In a previous work we tested successfully in biological systems the hypothesis of the correlation between nonlocal reality and deterministic chaos, of the copresence of local reality and non-local reality in physiological states, and of a sufficient high amount of information energy – EI – as catalytic process to maintain non-locality in the autopoiesis.

If the system were fully healthy, there would be actually a non-local reality (parallel to the local reality) - simultaneity and synchronicity - and the presence of deterministic chaos (chaotic or strange attractor) (9-20) . If there was disease, the autopoiesis would still be present, but the non-local reality and the correlated strange attractor equilibrium, corroborating the presence of deterministic chaos, would disappear so that we would observe just limit cycle equilibrium in the case of pathology, and fixed points in case of chronic disease.

The scheme of organization works relentlessly to achieve the special molecules known as organic phosphate or ATP, of mitochondrial origin. All cellular structures exist in conditions far from thermodynamic equilibrium: they are dissipative, far from equilibrium with their own stability, spontaneous emergence of new forms of order. As the flow of energy increases it is possible that the system encounters an instability - fork – at which the system itself can enter into a completely new state, where new structures and new forms of order can emerge - emergences - or self-organization.

At this point it is clear that normally functioning glycocalyx, e.g. those of skeletal muscle cells under efficacious treatment of *Chronic Fatigue Syndrome* (3), indicates that mit-DNA as well as n-DNA are now repaired and physiologically active (21-23).

The paramount importance of Glycocalyx bedside Evaluation.

Quantum biophysical semeiotic method to corroborate water memory-information, as referred above, is based on the non-local realm beside the local realm in biological systems and especially on the possibility of assessing glycocalyx function in every cell, I have discovered in former papers (5-24).

The easiest and reliable way to stimulate glycocalyx prove to be in my long, well-established experience *the insulin acute pick test* (24-28): in health, physician assesses the fluctuations of upper ureteral reflex (= vasomotility) in a tissue (e.g., skeletal muscle during small intense digital pressure upon the muscle) (29-32).

At the precise moment, upper ureteral reflex disappears, doctor brings about an “intense” stimulation of the VI thoracic dermatome (= pancreas stimulation), causing the acute pick of insulin secretion. “Simultaneously”, upper ureteral reflex appears, showing its highest intensity (7-16, 18-23).

On the contrary, in presence of glycocalyx dysfunction (i.e., “structure”, according to Maturana-Varela), as in disorder of whatever nature, including CFS (3), indicating an impairment of both n-DNA and mit-DNA (= “organization”), under identical above- described experimental condition, the latency time of upper ureteral reflex, i.e., increasing of oscillation, is 2-5 sec. or more, in relation to the seriousness of underlying disorder.

For instance, at base line in a former research regarding CFS (3), latency time of glycocalyx stimulation was 5 sec., significantly pathological. Energized water with the energy frequency gathered by biceps and quadriceps muscles of the patient through Cem Tech, ameliorated simultaneously endocellular energy level: latency time of muscle-gastric aspecific reflex raised progressively to 16 sec. (NN = 8 sec.) in a few minutes. Only the day after, skeletal muscle glycocalyx function resulted perfectly normal: its stimulation under *the insulin acute pick test* resulted normal.

Conclusion

In the paper I have illustrated some experimental evidences, easy to perform and reproducible by physician skilled in Quantum Biophysical Semeiotics, aiming to underline the central role played by glycocalyx bedside evaluation in demonstrating water memory-information.

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