Quantum Biophysical Semeiotics Diagnosis of Brugada's Syndrome

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(English up-dated version)

According to a Quantum Biophysical Semeiotics (QBS) fundamental point of view, the anatomical and functional way of being of the parenchyma, both in physiology and in pathology, is related to the same relative situations of the microcirculation, allowing to study the first one by the second one, according to Angiobiotopy Theory, that completes the reductive Tischendorf's Angiobiopathy exclusively emphasizing the anatomic valence.

In Brugada's syndrome or Nava-Martini-Thiene Syndrome (1-5), who first described this syndrome, referring, unlike other authors, that structural alterations, such as sclerosis and degeneration lipid, exist at the level of the right atrium, apart from functional abnormalities of the local ion channels, particularly sodium. Other anatomical changes, however, that are today just suspected, will be demonstrated tomorrow with more sophisticated methods.

One fact, however, it is highly conceivable even now on the basis of the alterations reported by Nava-Martini-Thiene: the microcircle and the local microcirculation in the right atrium should probably have alterations typical of all other areas at "inherited real risk" of pathology, widely described, in biological systems, for example in a breast quadrant at risk of breast cancer (6).

Consequently, we conjecture that, at the level of the right atrium, the microcirculation "at rest" is already impaired for the presence of the so-called phenomenon of "flow's centralization" (microcirculatory deactivation) or it show a prolonged duration of the cardio-gastric aspecific (NN basal value: > 3 <4 sec.) to indicate a pathology, even initial, characterized by microcirculatory dissociation, type II, intermediate (9-11).

Much more information will be given in subsequent evaluations during and/or immediately after stress testing, dynamic assessment: preconditioning, compression of a large artery, such as the femoral one, manual pressure over the liver, and so on.

In health, at rest, with open eyes (to minimize the melatonin secretion), digital pressure of "mean" intensity, applied upon the skin projection of the right atrium, bordered with Auscultatory Percussion of the heart, causes a gastric aspecific reflex with a latency time of 8 sec., duration < 4 sec., differential lt > 3 < 4 sec. (7, 8).

On the contrary, based on Clinical Microangiology conjectures, above-referred, in a patient with Nava-Martini-Thiene syndrome (Brugada's syndrome), even if asymptomatic, the latency time of cardio (right atrium)-gastric aspecific reflex, "at rest", is reduced (<8 sec.) or sometimes normal, but the reflex's duration is prolonged (≥ 4 sec.), due to the impairment of local microcirculatory functional reserve.

In dynamic assessment, then, the parameter values related to reflex cardio (right atrium)-gastric aspecific are definitely pathological: tl < 8 sec., D > 4 sec. and differential latency ≤ 3sec., depending on the severity of the Nava-Martini-Thiene syndrome.

In fact, in individuals with tricuspid valve's insufficiency and/or dilatation of the right atrium, the pathological parametric values of the reflex, mentioned above, are observed. Certainly,

these are "pathological" non-specific data, that reveal general suffering of the right atrium wall, but they give rise to the suspicion of Nava-Martini-Thiene syndrome in young individuals, without heart in place, that maybe refer a family history and / or personal episodes of transient cardiac arrest and in whom, then, there was a right bundle branch block and ST-segment elevation in V1-V3 precordial deviations.

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