

A study case.

Abdominal Aortic Aneurism: Quantum Biophysical Semeiotic Bedside Diagnosis.

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Introduction

The Abdominal Aortic Aneurism (AAA) [1-12] and its inherited real risk (IRR) can be easily diagnosed with Quantum Biophysical Semeiotics (QBS) method [13], i.e., through the Auscultatory Percussion of the Stomach. The patho-physiology, symptomatology and diagnosis of IRR of Abdominal Aortic Aneurism and overt AAA are well described in previous research papers [14-17] and linked to the QBS Microcirculatory Theory of Atherosclerosis [18-24].

In order to diagnose the IRR of AAA physicians have to observe in daily practice the QBS procedure here described shortly as follows.

First of all, physicians have to ascertain the presence, or not, of the IRR of Cardio-Vascular Disease (CVD) (Antognetti's Sign) [18]. In fact, a positive Antognetti's Sign, indicates CVD Inherited Real Risk [19 - 22]. Soon there after, to localize where there it is precisely such a IRR of CVD (in case of overt AAA this sign is particularly intense, the reflex intensity is 3 cm or more, in relation to underlying AAA size); (2) to assess Vasa Vasorum density, in the site of the IRR of CVD; (3) to evaluate properly all parameter values of artery-gastric aspecific reflex, recognizing the seriousness of tissue acidosis; (4) to recognise local compliance impairment; (5) to observe the presence of the inflammation sign, recognising the autoimmune nature, by stimulating the precise site of the risk by means of nail pressure.

In health, Antognetti's Sign is negative [18, 19]: an *intense* digital pressure, applied upon every point of a large artery, e.g., the femoral artery at the groin, does not bring about *simultaneously* the Gastric Aspecific Reflex, that appears physiologically after 16 s, as in Artery Preconditioning.

On the contrary, in individuals involved by the IRR of CVD, including atherosclerosis and AAA, since their beginning as IRR, under the identical experimental condition above described, such a reflex appears *simultaneously* (its intensity parallels the seriousness of the underlying predisposition to CVD).

Interestingly, only in presence of autoimmune inflammation, after the gastric aspecific reflex there is a tonic Gastric Contraction, which appears when Latency Time of Artery-Gastric aspecific reflex is lower than 6 sec., indicating an intense tissue acidosis. Soon thereafter, by means of numerous QBS signs [19-21], doctors can localise exactly the site of CVD IRR, for instance in a precise tract of abdominal aorta.

The Artery-Gastric aspecific Reflex gives a lot of precious information: Latency Time lasts physiological for 8 seconds as far as the reflex duration is less than 6 seconds (normal duration is more than 3 seconds but less than 4 seconds), informing on tissue oxygen level, i.e., tissue acidosis.

Interestingly, only when the reflex duration is more than 6 sec., latency time begins to lower. In addition, as referred above, if the Latency Time of the reflex decreases to less than 6 sec., than it is followed by a Tonic Gastric Contraction, that indicates a severe tissue acidosis, i.e., a lowered istangic pH. From the above remarks, doctors can assess at the bedside the acidity level at the arterial wall, wherein IRR is located.

AAA localization. QBS assessment compared to instrumental diagnosis. A study case

Patient XY medical history:

Patient XY asked an intervention of manual medicine and acupuncture for a right knee pain. This is the information derived by his history at a glance: cardiac arrhythmia, hypertension and hypercholesterolemia in treatment, diffuse atherosclerosis, and also he refers to a small dilatation of the aorta. At this point the physician invites the patient not to refer other information about aortic dilation.

Bedside QBS diagnosis:

At this point in time, the physician visits the patient according to QBS bedside diagnosis. In particular, through the Auscultatory Percussion of aorta, he delimits the various portions of aorta drawing its border, i.e., the skin projection of aorta. The QBS procedure, as above shortly mentioned is as follows:

- 1) QBS Diagnosis of Antognetti's sign. There is a positive Antognetti's sign. This means that there is an Inherited Real Risk of CVD in this patient (see Appendix).

The aortic- Gastric Aspecific Reflex is positive with an intensity of more than 2.5 cm.

- 2) Delimitation of Aorta border.

The physician delimits the aorta's border through the 'Auscultatory Percussion' of abdominal aorta, i.e., the digital pressure is applied upon the femoral artery at the groin. By this way he delimits the margins of the iliac artery and then back to the bifurcation, the lower starting point for aorta's percussion [14-16]. The figure 1 below shows the delimitation of Aorta's border of the visited patient done as follows: a) the doctors marks with a dot (listening point) every change of tone of the Auscultatory Percussion just described; b) all the dots so marked delimits the border of the skin projection abdominal aorta's area. In the figure 1 you can note the dilatation of the skin projection abdominal aorta's area (3.2 cm) just above the umbilical scar.



Figure 1

At this point in time, the physician evokes the Gastric aspecific reflex "pressing" on the various segments of the aorta for a "rapid diagnosis" of parietal enlargement, regardless of AAA. size. Moreover, the presence of calcifications in the vessel wall (as well as in any other tissue) causes a mild tonic gastric contraction (tGC) after the aorta-gastric aspecific reflex (after the dilation, the stomach contracts): lithiasic reflex [24]. At this point we can observe the eco-doppler diagnosis (figure 2) that clearly confirms the initial QBS bedside diagnosis.

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Appendix

We can compare the above mentioned diagnosis of patient XY with that of a dyslipidemic subject (patient Z) with negative Antognetti's sign (Figure a, Figure b, Figure c). This fact demonstrates that even if the increased blood levels of lipoproteins is a risk factor of ATS, atherosclerosis can occur exclusively in the presence of CVD Inherited Real Risk, i.e., positive Antognetti's sign. All risks factors are innocent bystanders if there is not at the base the relative QBS Constitution and Inherited Real Risk.

| Pag.1 di 3 | ESAME | RISULTATO DEL 21/02/2009 | Metodo Int. di riferimento | Unità di misura |
|--------------------------------------|---------------------|-----------------------------|--|-----------------|
| <u>BIOCHIMICA CLINICA</u> | | | | |
| | COLESTEROLO | 291 * | ENZIMATICO COLORIM. 100 - 200 | mg/dL |
| | COLESTEROLO-HDL | 70 | ENZIMATICO > 35 | mg/dL |
| | COLESTEROLO-LDL | 170 * | ENZIMATICO 0 - 150 | mg/dL |
| | TRIGLICERIDI | 60 | COLORIMETRICO 50 - 150 | mg/dL |
| | APOLIPOPROTEINA -A- | 212 | NEFELOMETRICO 125 - 215 | mg/dL |
| <u>MARCATORI</u> | | | | |
| | CA-125 | 8,4 | CLIA 0 - 35 | U/mL |
| <u>ENDOCRINOLOGIA FERTILITA'</u> | | | | |
| | FSH | 27,9 | CLIA Fase follicolare 3,5 - 12,5 Picco ovulatorio 4,7 - 21,5 Fase luteale 1,7 - 7,7 Menopausa 25,8 - 134,8 | mUI/mL |

Figure a

Figure a and figure b show the laboratory exams repeated respectively in 2009 and 2011 stating that patient Z is dyslipidemic. In figure c the abdominal aorta border (skin projection's area of abdominal aorta) of patient Z is delimited as described previously. Patient Z has got negative Antognetti's sign according with QBS bed-side diagnosis.

| Esame | Risultato | Unit. | Mi@alori Riferimento |
|----------------------------|-----------|--------|----------------------|
| sodio | 139 | mmol/L | 136 - 145 |
| potassio | 4.6 | mmol/L | 3.5 - 5.1 |
| cloro | 106 | mmol/L | 99 - 109 |
| calcio | 9.6 | mg/dL | 8.4 - 10.2 |
| magnesio | 1.6 | mEq/L | 1.3 - 2.1 |
| fosforo inorganico | 4.4 | mg/dL | 2.7 - 4.5 |
| bilirubina totale | 0.86 | mg/dL | 0.00 - 1.00 |
| bilirubina diretta | 0.28 | mg/dL | 0.00 - 0.50 |
| glucosio | 94 | mg/dL | 70 - 105 |
| urea | 43 | mg/dL | 10 - 50 |
| acido urico | 3.1 | mg/dL | 2.6 - 7.2 |
| creatinina | 0.93 | mg/dL | 0.70 - 1.20 |
| proteine totali | 7.1 | g/dL | 6.4 - 8.3 |
| albumina | 4.3 | g/dL | 3.5 - 5.5 |
| trigliceridi | 79 | mg/dL | 30 - 200 |
| colesterolo totale | 288 | mg/dL | * 50 - 210 |
| colesterolo LDL | 198 | mg/dL | * 0 - 160 |
| colesterolo-HDL | 74 | mg/dL | * 40 - 60 |
| alanina aminotransferasi | 20 | U/L | 10 - 35 |
| aspartato aminotransferasi | 20 | U/L | 10 - 40 |
| colinesterasi | 8585 | U/L | 4000 - 12600 |
| lattato-deidrogenasi | 150 | U/L | 125 - 243 |

Continua...

Figure b



Figure c