Quantum Biophysical Semeiotics Clinical Diagnosis of Acute Appendicitis.

by Sergio Stagnaro

All physicians agree with the statement that bedside diagnosing appendicitis in children, especially under 3 years, is still difficult (1, 2, 3). Looking at the cause of delaying acute appendicitis, we recognize the lack of an efficacious clinical tool, which allows a prompt diagnosis, in spite of location of appendix and severity of its inflammation.

In fact, Authors constantly overlook the clinical, auscultatory percussion diagnosis, I made for the first time 30 years ago (2) (For further information, See my site www.semeioticabiofisica.it, Practical Applications), which recently was enriched by numerous signs, gathered at the bed-side by means of the Quantum Biophysical Semeiotics (1-3, 6,8), a method of investigation based chiefly on the old auscultatory percussion, briefly described as follows. Compared with the insufficient reliability of the traditional physical semeiotics (30% of surgical operations are made on healthy appendix), Quantum Biophysical Semeiotics allows doctor to bedside recognize, promptly and easily, appendicitis by mean of a large number of signs, among them the typical Gastric Tonic Contraction (GTC), present in 100% of cases of appendicitis, not considering its location and seriousness, as permits me to state 60 year- long well-established clinical experience (6,7).

In addition, GTC permits rapidly to evaluate the disorder seriousness, as well as therapeutic monitoring, performed also with the aid of other numerous biophysical semeiotic signs, which are "aspecific" – inflammation signs, observed in all diseases, infective, connectival, tumoural in origin – and "specific", i.e. typical of the appendicitis (1,2,3). Among other numerous signs, due to space limits I remember only the Rethiculo-Endothelial System Hyperfunction Syndrome (RESHS), now known as Monocytes-Macrophages System (2,3), although more specific and sensitive, and Acute Antibody Synthesis Syndrome (AASS) (2), described in detail also in above-cited website. RESHS corresponds to the ESR elevation and to altered proteins electrophoresis, but is of both more sensitive as well as specific (1-7). To detect these signs and syndromes, doctor has to know only the Auscultatory Percussion of the stomach, really easy to be performed.

In order to recognize and "quantitatively" evaluate the GTC Sign doctor invites the patient, lying down in supine position, "to press down its abdomen as to evacuate" (simulated evacuation test; practically patient is invited to carry out Valsalva's manoeuvre) – Berti-Riboli's Sign *– or most desirably doctor applies digital pressure precisely upon cutaneous projection area of the inflammed appendix, previously localized by means of auscultatory percussion,

immediately (latency time: 1-3 sec.) stomach dilates (i.e., the gastric aspecific reflex suddenly appears), then, after further 3 sec. precisely, stomach contracts rapidly in intense manner: GTC Sign of 2 cm. (3, 6, 7).

In health, the latency time of gastric aspecific reflex is 10 sec., duration > 5 sec. and, finally, GTC < 2cm. In case of retrocaecal appendicitis, until now really difficult to recognize clinically with the aid of the old, traditional, accademic physical semeiotics, the patient bends its stretched right leg towards abdomen: the "spontaneous" GTC rapidl appears (100% of cases), after a gastric aspecific reflex with 1-2 lt and lasting once more 3 sec.: Bella's Sign** "classic" (Bella's Sign "variant": patient bends the left leg in identical manner as described above, with the same results in case of appendix located in left ileo-pelvic region). In health, under identical above-described conditions, i.e., retrocaecal appendix, latency time of gastric aspecific reflex is 10 sec., duration > 5 sec. and GTC intensity is < 2 cm. Interestingly, the degrees of reflexes paramaters are the same in both signs, pointing out internal and external coherence of biophysical semeiotic theory. A well established clinical experience allows me to state that by means of Quantum Biophysical Semeiotics, the diagnosis of appendicitis is clinical as well as very quick, as in case of inherited renal cancer, and overt cancer: "intense" cutaneous pintching, lasting one second, of one esophagous trigger point brings about GTC in case of acute appendicitis! (9, 10).

I have recently opened a new way in the clinical diagnosis, based on the presence of inflammation, even low-grade chronic inflammation – in all disorders, including CVD/CAD, Osteoporosis, T2DM, Cancer, starting from the very initial stages.

Interestingly, in health, the nail pressure upon appendix trigger points provokes the gastric aspecific reflex after a Latency Time of 10 sec. exactly.

On the contrary, under identical experimental condition, in case of appendicitis, the Latency Times lowers, inversely correlated with the seriousness of desease, thus facilitating its diagnosis.

Unfortunately, nowadays, due to the traditional physical semeiotics, although sophysticated testing of image semeiotics and laboratory, diagnosing appendicitis at the bed-side is still sometimes difficult particularly in children and actually this fact accounts for the reason that patients are too often operated late.

- * Dedicated to my friend Prof .Edoardo Berti Riboli , Surgeon at Genoa University
- ** In Memoriam of my friend Dr. Luigi Bella, General Practitioner, Lavagna (Genoa)

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