

Vascular News

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Medicine: it's time to change

Report of the Congress 'Medicina: è tempo di cambiare' (Medicine: it's time to change), San Benedetto del Tronto (Italy)

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On February 4th 2023 the Congress “Medicina: è tempo di cambiare” (“Medicine: it's time to change”) took place in San Benedetto del Tronto (Italy). The congress expressed the growing interest of scientific community towards a new vision of biomedicine scientific research and medical practice. In fact, integrative medicine, translational medicine, epigenetics, psychoneuroendocrineimmunology define a broader framework of a less reductionist medical approach to the patient.

A more comprehensive and less drug/technology-centric way of diagnosing and treating chronic degenerative diseases (CDD) is being advocated in several publications in the last decade. Conventional biomedical science of our days suffers from a series of critical issues both in scientific research and in clinical practice; a movement is thus emerging, the so-called "choosing wisely", which aims to bring the pathophysiology of diseases back to the center and above all indicates how to choose the diagnostic-therapeutic path wisely, evaluating the cost-effectiveness and risk-benefit ratio more suitable for patients.

Since the introductory lecture (https://www.youtube.com/watch?v=ujYlh_BeNtc&t=578s), the critical issues of scientific research and medical practice in several fields were highlighted, focusing on the need to carefully evaluate the abuse of medicines and health technologies, also shining a light on the possible conflicts of interest in scientific publications and on the many ethical and deontological problems of current medical science. Numerous publications have in fact elucidated how too often the guidelines are based on studies sponsored by companies, also by virtue of the limited possibilities of independent research. Furthermore, a high percentage (over 50%) of therapeutic approaches lack a high-level validation as to Cochrane reviews, systematic reviews, metanalysis, which explains why several currently used protocols, often based on rigid guidelines, have shown their undeniable limits in terms of efficacy, safety, cost/effectiveness.

Of interest, speakers and audience shared the concept that the complexity of medical science requires a certain grade of liberty of the health professional, who should merge evidence-based medicine with own science and conscience, to reduce overuse and mistakes (medicine is still the third leading cause of death in USA, after cardiovascular and neoplastic diseases) and to be more comprehensive and patient-centred in her/his clinical practice.

Finally, it was highlighted as on one side medicine has prolonged average lifespan (not the maximum lifespan), but on the other side it has not prolonged healthspan, which creates an exponentially increasing number of diseased and disable patients over the 70 years of age, in need of costly drugs and technologies. Hence, this “dangerous” discrepancy brings the risk to rapidly lead the current national health systems and, more broadly, our western society to a socio-economic collapse.

The session about psychoneuroendocrineimmunology (PNEI) was aimed at presenting the clear-cut evidence concerning the strong influence of the early life adversities on adult's diseases, through the complex network of stress resilience alterations. Basically, it was shown how the vast majority of CDD, such as cardiac-cerebral atherosclerosis, neurodegeneration (Alzheimer, Parkinson etc.), diabetes, obesity, autoimmunity and cancer, are strictly dependant upon the dysfunctionality of the mind-body network. More specifically, a great number of studies have documented

the extremely relevant influence of altered management of chronic stress and of an altered lifestyle (e.g. a disrupted sleep) on several metabolic pathways, with detrimental repercussions on the onset and evolution of CDD, on aging and on early all-cause mortality.

Of interest, the assessment of heart rate variability was shown to be a reliable technique, increasingly used and appreciated in terms of investigation of PNEI, psychobiological resilience and specifically autonomic nervous system dysfunction (being the latter one of the main factors).

Diagnostics and therapy of cardio-cerebro-vascular atherosclerosis have been re-assessed through a series of presentations which highlighted the sound data concerning the multi-factorial pathophysiology of this disease. Oxidative stress and inflammation have been acknowledged as the basic pathomechanisms which lead to plaque formation, due to the oxidation of a specific fraction of LDL particles (namely the small and dense LDL). By virtue of these “innovative”, but evidence-based concepts, a reappraisal of the blood screening of atherosclerotic patients has been proposed, aiming at including oxidized LDL, apolipoprotein B and similar biomarkers which assess the true atherogenic biochemical pathways and risk factors.

Most speakers presented a relevant amount of well-referenced literature to dispel the “old” myth of cholesterol as the culprit of the atherogenesis. Furthermore, based on several publications in high-level journals, the evidence concerning the multiple adverse effects of lipid lowering medications on human health was presented. Similarly, it was proven that all-cause mortality is clearly higher in patients with lower levels of cholesterol and LDL, which accounts for the necessity to significantly reduce the use of statins, anti-PCSK9 etc. Furthermore, these drugs were documented to bring little if no benefit in terms of cardiovascular disease (CVD) while inducing, conversely, several CDD primarily due to the serious damage they inflict to mitochondria.

The pandemic of diabetes (diabetes and obesity) was discussed in a few presentations, revealing the extremely detrimental role of inappropriate high nutritional load of carbohydrates (and consequent insulin excess) in current western-style diets. Vice-versa, the beneficial role of specific saturated fats, such as butyrate, in CVD, oncology and other microbiota-related CDD has been highlighted, as specified in sound literature data.

Prof. Pescarmona highlighted the relevance of mitochondria function and of iron metabolism in pathophysiology of diabetes and metabolic syndrome, detailing a few innovative therapeutic possibilities and evidencing a few critical issues regarding a few conventional anti-diabetic drugs. Moreover, most speakers have focused on the extreme importance of a proper diet (calorie-restriction, intermittent fasting and low-carb diet,

intake of non-processed food, etc.) in the fight against most CDD.

The incidence of autoimmune diseases is worryingly growing in the general population, especially in females due to specific genetic and epigenetic reasons. While the current immune-depressive medications tend to cure the signs and symptoms of these patients, it has been outlined how a correct therapeutic approach should take in account all those psychosocial, lifestyle, nutritional and environmental factors which objectively are at the root of these diseases. Though neglected in the conventional medical approach, several non-pharmaceutical measures were documented to be of help in these syndromes, where the improvement of psychological stress management and of erroneous habits objectively play a determinant role.

Biophysics-based treatments, such as photobiomodulation, microcurrents, quantum magnetic resonance/bioresonance, are still little known and diffused in medicine, though a series of scientific publications are documenting the relevant role of mechanotransduction (the basic phenomenon induced by these biotechnologies) in cell metabolism and stem cell vitality/development.

Cell senescence, aging and CDD share a series of deranged biochemical pathways, again based on mitochondria dysfunction, but also on the so-called “inflammaging” (chronic low grade cellular inflammation as culprit of aging and of CDD), altered apoptosis, oxidative stress and so on. Mitochondria role goes far beyond the classical ATP production, being at the intersection of several dysmetabolisms, psycho-biological conditions and stressor-based cellular pathways.

The possible interaction with mitochondria through hormesis (“mitohormesis”) permits to elicit a beneficial increase of psychobiological resilience of the individual, thanks to the exposure to low-dose stressors (such as fasting, cold/heat, polyphenols), which overall brings a better longevity. The complexity of the main hallmarks of aging has been elucidated, and most advanced research on these topics has been presented, explaining how longevity medicine is increasingly becoming of paramount importance in the medical community.

A specific session was dedicated to pharmacotoxicity and environmental toxicity; it was highlighted how statins bring a significantly increased risk of various CDD while showing a neutral or detrimental effect on all-cause mortality; similarly, a large number of studies have documented that proton pump inhibitors are linked to severe adverse effects, namely an increased incidence (OR 1.58-5.40) of gastro-oesophageal-pancreatic cancer, diabetes, asthma, dementia and, intuitively, gut microbiome alterations. Lastly, sound data were presented on: a) the need to combine vitamin D supplementation with vitamin K2 (to avoid side-effects and to potentiate its efficacy), b)

the necessity to administer only the methylate form of folic acid in low dose (well below 1 mg per day), c) the abused administration of opioids which bring a series of psychoneurological adverse effects, as well as an increased death rate.

Moreover, chemical and physical pollutants were shown to interfere, also under the form of endocrine disruptors, with human health contributing especially, but not only, to metabolic diseases.

The last session focused on integrative oncology, once again presenting some evidence on the relevance of PNEI system on the onset and prognosis of neoplastic diseases. A few complementary treatments, such as oxygen-ozone therapy, cannabinoids and high dose melatonin,

were discussed together with the proposal for a science-backed beneficial nutritional plan, mostly based on a lower carbohydrate intake, for neoplastic patients.

Ultimately, the event has represented a first step in trying to share broader scientific horizons in biomedical discipline, presenting a wide range of evidences against a few currently used therapeutic approaches and in favour of a more integrated medicine, not solely based on drugs and technology, aimed at “choosing wisely” through a less reductionist approach.

The videos of all the presentations (Italian language) of the congress are available at the link <https://www.youtube.com/@associazionenutrage9969/videos>

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Useful references

- 1) Bottaccioli F, Bottaccioli AG. *Psiconeuroendocrinoimmunologia e scienza della medicina integrata. Il manuale.* Edra Ed.2022
- 2) Cavezzi A, Ambrosini L, Colucci R, Di Ionna G, Urso SU. Aging in the Perspective of Integrative Medicine, Psychoneuroendocrineimmunology and Hormesis. *Curr Aging Sci.* 2020;13(2):82-91
- 3) Know L. *Mitochondria and the future of medicine.* Chelsea Green Publishing; 2018
- 4) Cavezzi A. Medicine and Phlebotomology: Time to Change? *J Clin Med.* 2020 Dec 18;9(12):4091. doi: [10.3390/jcm9124091](https://doi.org/10.3390/jcm9124091)
- 5) Ioannidis JPA. Why most published research findings are false. *PLoS Med.* 2005;2(8):e124. DOI [10.1371/journal.pmed.0020124](https://doi.org/10.1371/journal.pmed.0020124)
- 6) Engel GL. The need for a new medical model: a challenge for biomedicine. *Science.* 1977;196(4286):129–36
- 7) Cavicchi I. Medicina Interna, paziente complesso... verso una clinica relazionale e ragionevole. *Ital J Med* 2012;6(4):259–64.
- 8) Casarett D. The science of choosing wisely--overcoming the therapeutic illusion. *N Engl J Med* 2016;374(13):1203–5
- 9) Feminò R, Feminò G, Cavezzi A, Troiani E. PCSK9 inhibition, LDL and lipopolysaccharides: a complex and “dangerous” relationship. *Int Angiol* 2021;40(3):248–60.
- 10) Cavezzi A, d'Errico G, Colucci R. Biomedical science limitations and flaws: why not choose wisely? *JTA VR* 2022;7(3) DOI: [10.24019/jtavr.142](https://doi.org/10.24019/jtavr.142)

CHIVA approach to venous insufficiency

Report of the Webinar - MASTERCLASS of the Brazilian Association of Phlebology and Lymphology (ABFL), with the support of the Vasculab Foundation, Mar 28, 2023, Brazil

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