

P-23 – Prof. Dr. Andras Szasz, et al - Oncothermia combination with traditional Chinese medicine: network approach



ONCOTHERMIA COMBINATION WITH TRADITIONAL CHINESE MEDICINE: NETWORK APPROACH



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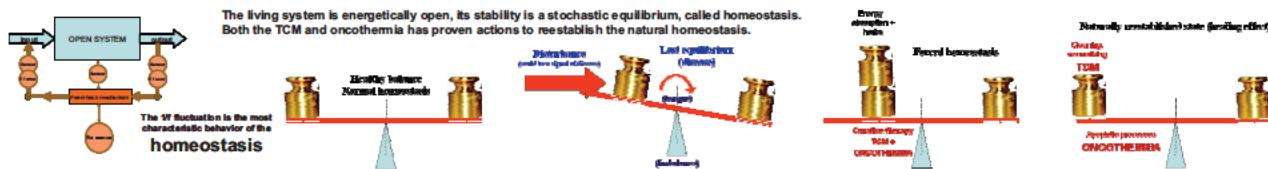
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Objective

Acupuncture and their connective pathway, the meridians are ancient Chinese knowledge but it is not understood yet in details [1]. Request of the stable homeostasis of the complex organisms is demanding interdisciplinary approach and new paradigm for the topic. The detecting and reconstructing the deviation from the normal balance of the homeostasis is the basic principle of TCM. The Chinese herbs, the physical (mechanical or electromagnetic) and mixed forms of heating and diffusion therapies (moxa therapies) approaches are pointing these problems, and solving it with ancient methods. Oncothermia method (OTM) uses also the deviations from the normal homeostasis for selecting the tumor cells and on this basis ignites natural processes to eliminate them from the system, reestablishing the communication harmony between the cells [2]. This technique [3] is well known and has been proven from the laboratory level to the clinical applications [4]. Our aim is to synergize the TCM with OTM on the common basis of equilibrium demand, and use the recognition of the deviations from the complex harmony of the organism or its part for selection to act properly.

Method, research proposal

An extended network approach was presented in the topic [5], and we would like to continue our research on this basis. The *in silico* studies will have their roots from the network analysis together with the modern fluctuation theory for complex living organisms. (Fractal physiology) was developed in the last decades to study this complexity like self organization [6], [7], [8], [9], fractal physiology [10], [11], [12], [13], and the bioblocking [14], [15], [16]. Oncothermia is widely using these new scientific results [17], [18], as well as the resonance phenomenon is studied and used in the light of a new theory [19], and special vector potential theory [20], [21], [22] helps to complete these methods. The problems of the thermal limit in the deep seated tissues is theoretically [23] and experimentally [24] solved, so it has no any barrier for the wide investigations in synergy experiments. TCM involves electro acupuncture and laser acupuncture, which are similar in their electromagnetic (conductive) approach to oncotherapy effects. We studied the network control in acupuncture and connected it with the fractal physiology approach, used essentially in oncotherapy applications. The network is recognized as scale λ independent, and so well generalized for all the living structures.

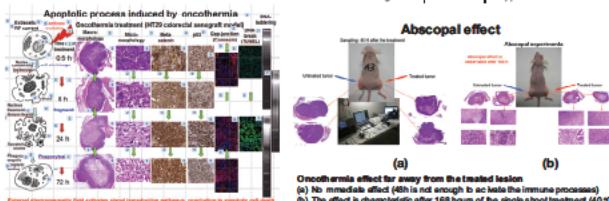


Oncotherapy promotes the natural processes and in this meaning has coherent aims with TCM philosophy and especially with the acupuncture. The main proven effects of acupuncture are the pain-reduction and general analgesia, and reduction of the side effects of cytotoxic drugs and other side effects of the aggressive therapies. These factors could be good complementary facilities of the TCM and oncotherapy methods.

The best, hypothetical cooperation of the methods however is on the field of immune-reactions

many evidences we have in oncotherapy on the natural apoptosis and abscopal effect (immune assisted hypothesis)

Numerous published data show the immune-effect of acupuncture					
Acupuncture humans		Acupuncture animals			
Immuno action	References	Effect/action	Immuno action	References	Effect/action
Macrophages	25 30	promoter	Macrophages	29	promoter
Neutrophils	25 32 34	promoter	Neutrophils	31	promoter
Neutro.	31	not act	Kidney	37	not act
NK cells	25 30 40 41	promoter	Lymphocytes	37	promoter
Lymphocytes	25 30	promoter	Immunoglobulins	53	promoter
Lymphocytes	45	suppressor			
Immunoglobulin B	48 49	suppressor			
Immunoglobulin G	50	promoter			
Immunoglobulin M	51 52	no effect			
Electro acupuncture humans		Electro acupuncture animals			
Immuno action	Reference	Effect/action	Immuno action	References	Effect/action
NK cells	42	no effect	Macrophages	26 27	suppressor
			Macrophages	28	no effect
			NK cells	35 36 38	promoter
			Lymphocytes	44 46	suppressor
			Immunoglobulins	44	suppressor



Conclusion

Recognition of the distortions in the healthy tissue have some common principles and possibilities in TCM and OTM

The synergy of the ancient knowledge and the high tech state of art of the medical knowledge could be established with this research

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The meridian system can be explained by network approach, and the action of acupuncture explained and plasticized on this level.

The "hardware" of
meridians based on
the general networks
in the body

