

Oncothermia combination with Traditional Chinese Medicine: Proposal on Chinese Herbal Medicine approach

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Background: Hyperthermia is an ancient oncology method. It is the very first treatment modality for this type of disease, having 5000 year history [1], based on the Sun as the overall curative force in ancient Egypt. Later Hippocratic paradigm described it using physiological process (acidosis) to eliminate the malignant tissue. This natural approach is in well correlation with the far-away developed medical concept in the same ancient time: the Traditional Chinese Medicine (TCM) [2]. This medical philosophy was also based on natural harmony inside and outside the human organism. In progress of historical time TCM had been more sophisticated and developed, but the hyperthermia could not keep abreast with the development of the medicine, and was hindered by other western medical methods (WMM). However in late 80th of last century a new paradigm of hyperthermia was developed, the oncothermia method (OTM) [3]. OTM applies the ancient hyperthermia on different way, replacing the static thermal driving force to dynamical equilibrium concept, promoting the natural processes in curative direction [4]. It is a matter-of-course to make synergy between the two approaches, uniting the best line of TCM and OTM. Our present article underlines the main connections with the herbal medicine of TCM (Chinese Herbal Medicine CHM) and oncothermia.

Method: There are various CHM substances acting palliative or curative on tumorous diseases. For example of pain reduction the “Senecio palmatus”. For curative treatments special moxibustion techniques with various complex mixture of herbs could be applied [5]. Synergetic effects of the OTM and CHM is expected due to the well targeted tumor-tissue by OTM in combination with the effective CHM like Tongyou-sum plant. The effect of synergy will be investigated by in silico, in vitro and in vivo experiments, using special OTM device for laboratory use (EHY110, Oncotherm). The latest histomorphological and immunohistochemical methods will be used for evaluation; mainly concentrating on p53 tumor-suppressor protein and the apoptotic pathways, including beta-catenin. Protocols of clinical studies will be worked out on the basis of the experimental results.

Conclusion: Potential of the synergy of high-tech OTM and TCM is extremely huge. We are ready to work out the European alternative of the “East meets West in cancer care collaboration” [6] on the basis of the widely applied TCM evidences [7].

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