4th International Conference on Molecular Medicine and Diagnostics
26th Cancer Genomics Congress: New Era for Cancer Prevention
&
International Conference on Biomarkers and Clinical Research
July 15-16, 2019 Abu Dhabi, UAE

Whole body hyperthermia as an alternative therapeutic approach in cancer treatment

Fahimeh Faghihi Moghadam
Shahid Beheshti University of Medical Sciences, Iran

Hyperthermia refers to elevation tumor temperature from 39 up to 43 degree Celsius. Actually therapeutic hyperthermia has been used as an adjuvant treatment for cancer, since end of the 19th century after observations William Coley who found that tumor is diminished after induction of fever by bacterial toxins. Hyperthermia therapy refers to treatment tumors through heating which has been used since the time of the ancient Egyptians. The term hyperthermia in oncology means treatment of malignant disease by heating in different ways. Hyperthermia nowadays can be applied in combination with other modalities such as radiotherapy or chemotherapy in cancer treatment. Actually the exact mechanism of direct HT-induced cell death is not well understood. Typically there are three categories for hyperthermia, including local, regional and whole body. Based on the temperature whole body hyperthermia classify in three type, mild, fever range and extreme. In mild hyperthermia, the temperature is from 37.5 up to 38.5 degree Celsius in fever range hyperthermia, 38.5 up to 40 degree Celsius and extreme hyperthermia, the temperature above 40 degree Celsius. Nowadays whole body hyperthermia known as immunotherapy related to cancer treatment in oncology. To regard as many studies that has demonstrated immunological effects of Fever Range Whole-body Hyperthermia (FR-WBH). The most important role of elevation temperature in fever range is immunological effects. It is now appreciated that heating tumors (*in situ*) can activate vascular, metabolic and immunologic parameters of the tumor microenvironment which may play an additional role in radio chemosensitization beyond hyperthermia induced cell killing of tumor cells. Here we will review whole body hyperthermia related to cancer treatment.

Biography

Fahimeh Faghihi Moghadam has completed her Master of Science degre from Shahid Beheshti University of Medical Sciences, Iran. She is currently working as a Director of Whole Body Hyperthermia at Shohadaye Tajrish Hospital. She has published more than 22 papers in reputed journals and has been serving as a Member of European Society of Hyperthermic Oncology at European Society of Hyperthermic Oncology, Germany and also Member of Iranian Association of Medical Physicists.

fahimeh.faghihi@yahoo.com