

14 years fever-range whole body hyperthermia in adjuvant recurrence prophylaxis of breast cancer

Dr. med. Stephan Wey
Ambulatory of Internal Medicine

Presented at ESHO, Berlin, 2018

Cite this article as:

Wey S. (2018); 14 years fever-range whole body hyperthermia in adjuvant recurrence prophylaxis of breast cancer; *Oncothermia Journal* 23:16-17

www.oncothermia-journal.com/journal/2018/14_years_fever_range_whole_body_hyperthermia.pdf

„14 years fever-range whole body hyperthermia in adjuvant recurrence prophylaxis of breast cancer“

Dr. med. Stephan Wey, DGHT-/ESHO-Symposium, Berlin, May 2018

- **Introduction**
 - In the concept of biological cancer therapy fever range whole body hyperthermia (wbh) plays an important role, but mostly in palliative situation. In the early adjuvant setting, there are only few data.
- **Objectives**
 - Since starting work in the internal medicine ambulatory in early 2002 a group of patients is observed, that was treated adjuvant at most high risk constellation after R0 resection with at least two fever range whole body hyperthermia and complementary based therapies (nutrition, lifestyle, vitamin D, selenium and others).
 - There is an immunological importance of fever (e.g. rare in cancer patients, spontaneous remissions after fever, remissions after induced fever)
 - Research on fever or hyperthermia-induced tumor perfusion, changes of immunological effector cells (NK cells, dendritic cells, tumor-infiltrating cells) and production of heat shock proteins can explain these phenomena. Can tumor patients profit from whole body hyperthermia series in an adjuvant setting concerning tumor survival?
- **Patients and methods**
 - The largest group in my ambulatory are women after breast cancer surgery, n = 50.
 - With a few exceptions, the patients had moderate to high relapse risk, from nodal-positive (1-x) to G3, to refusal of conventional therapy (16 x G3, 10 x triple negative, 10 x nodal positive 1-3 and 9 x nodal positive 4 or more, 7x Her-2 overexpression). Some patients had previously rejected conventional adjuvant therapies (6 x chemotherapy, 6 x chest radiography, 2 x antihormones). In a single arm, prospective monocentric study they received a number of 2-20 wbh up to 40°C after surgery and adjuvant conventional treatments. Every 24 months the study population is evaluated for disease free and overall survival.
- **Results**
 - A recent (9-2016) evaluation in the recurrence prophylaxis currently shows a 5-year tumor free survival of > 90% (29/32) and an overall survival of > 96% (31/32). Only 1/32 patients died 7.7 years after FD of breast cancer.
 - These data could be discussed in the context of the risk constellation, frequency of hyperthermia and time after primary diagnosis using the largest group of breast cancer patients of the cancer patients in the internal medicine ambulatory.
 - Statistically, after complete conventional therapy alone, <70% 5-year tumor free survival and an overall survival of <75% would have been expected.
- **Conclusion**
 - In the tumor follow up this approach of meaningful complementary basic therapy in combination with fever range whole-body hyperthermia should be more appreciated and evaluated.
 - These data are worth to be checked in a retrospective matched-pair analysis with one of the breast cancer data bases of any German university.
- **Contact**
 - Dr. med. Stephan Wey
 - Ambulatory of Internal Medicine
 - Laufbachstr. 38, 77886 Lauf
 - E-Mail s.vey@wey-partner.de