

Feasibility of local deep hyperthermia treatment in conjunction with standard cancer treatments and patterns of response

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PURPOSE: This is the first study of treatment with hyperthermia associated with standard cancer treatment (Radiotherapy +/- Chemotherapy), carried out in Andalusia (south of Spain).

OBJETIVES/MATERIAL AND METHODS: The study's objectives were to analyze the clinical benefits, response to treatment, treatment feasibility and comfort with hyperthermia associated with standard oncological treatment within the public health system in Andalusia. Secondary objectives analyze survival, quality of life, overall toxicity (general and specific oncological hyperthermia).

The design is a case-control study, applying hyperthermia treatment (10 sessions/ 2-3 per week), with standard treatment of Radiotherapy, Chemotherapy or a combination of both, in patients with primary tumors or metastasis ones treated with radical or palliative treatments with a life expectancy of at least of 6 months. Tumor locations are: Cervix, prostate, bladder, pancreas, non surgical head and neck tumors, brain tumors, preoperative rectal Cancer, advanced not surgical breast tumors, lung cancer.

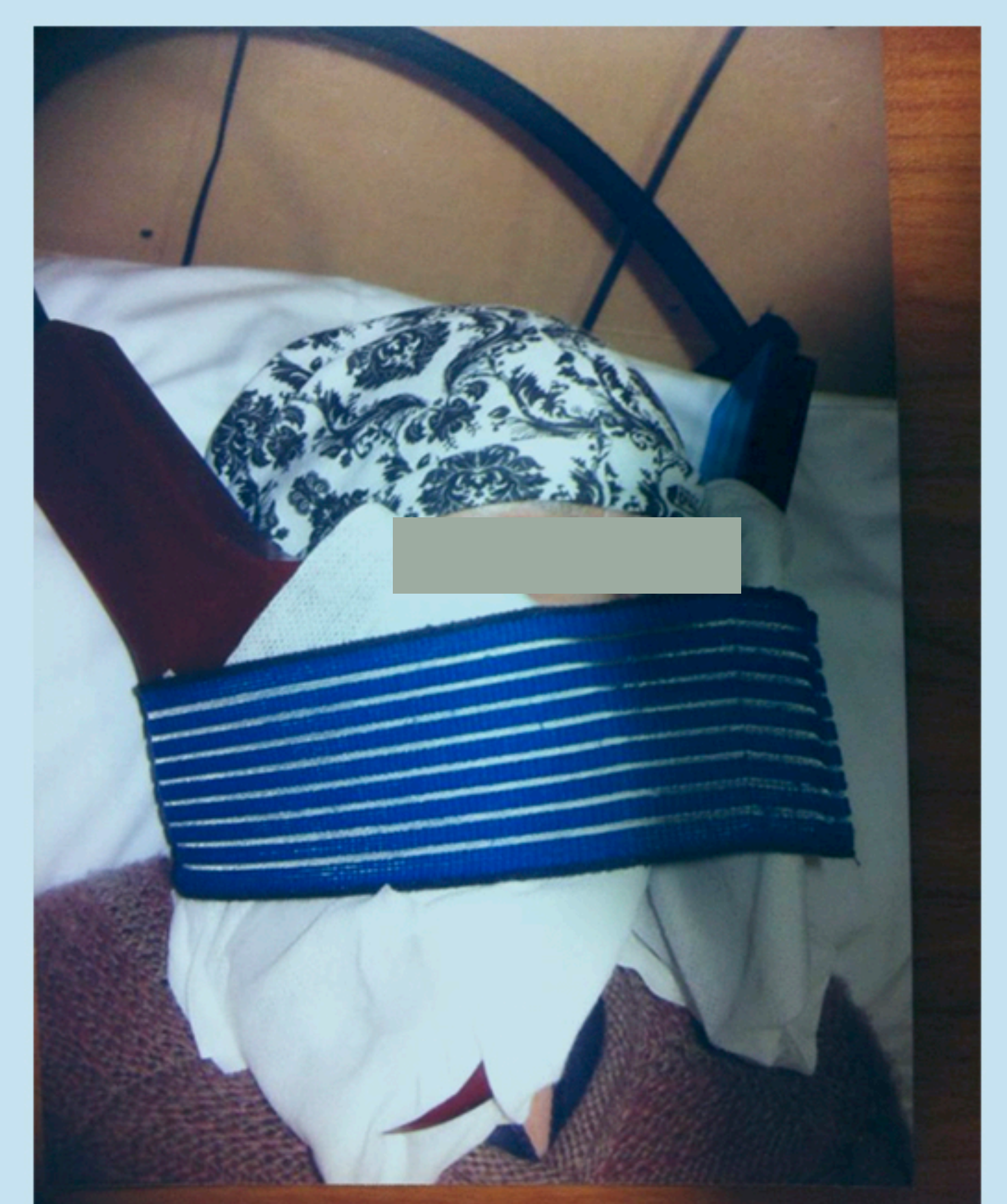
Tumor locations:

- Cervix
- Prostate
- Bladder
- Pancreas
- Non surgical Head and neck tumors
- Advanced non surgical breast tumors
- Brain tumors
- Nos small lung cancer



RESULTS:

We present our preliminary data from 63 patients (31 from the Juan Ramón Jiménez Hospital and 32 from the Carlos Haya Hospital), who received 10 sessions of high deep Hyperthermia, 2-3 times per week, 1 hour per session and a radiofrequency power between 150w and 400w according to the location of the tumor, associated with the standard cancer treatment (RT +/- CH). There are 38 men and 22 women, with a mean age 59 (34-80), the majority were brain or head and neck tumors in Carlos Haya Hospital, and rectal, prostate and breast tumors in Hospital Juan Ramón Jiménez. The intention of the treatment was curative 48.3%, neoadjuvante 23.4% and palliative 28.3%. Concerning the toxicity, there has been a burning type grade I toxicity in 36.3% of the cases and 66.6% of the patients had no toxicity. One patient reported pain/pressure in the treatment area, grade I (in an ulcerated breast). Despite the mild toxicity presented the patient's satisfaction with the treatment was very satisfactory in 81.2% of patients and acceptable in 18.8%.



CONCLUSIONS: Treatment with Hyperthermia is feasible and comfortable in 81.2% of patients in a public environment health hospital, with mild toxicity in 33% of the cases and the rest without no toxicity. It is essential a proper selection of the cases to be treated with Hyperthermia to expect good results with this treatment.

Fig. 3.1

