

## STABILIZATION OF METASTATIC BREAST CANCER WITH CAPACITIVE HYPERTHERMIA PLUS STANDARD-DOSE CHEMOTHERAPY AND/OR METRONOMIC CHEMOTHERAPY

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In our long experience in University Hyperthermia treatment of tumors associated with chemotherapy, we observed that response to associated treatment determines the disease stabilization and significant clinical benefits for 24 months in 12 cases of metastatic breast cancer, whereas chemotherapy alone had shown ineffective with disease progression, bone marrow toxicity G3-4, fatigue G2-3, nausea and vomiting G1-G2, bone pain G3-4 and visceral pain G2-3. (Table 1). 2 out of 12 patients underwent hormone therapy alone because they were allergic to chemotherapy drugs, other 10 patients underwent CHT+/- Hormone Therapy according to the protocols seen in Table 2.

TOXICITY WITH CHT ALONE	TOXICITY WITH ASSOCIATED THERAPIES (CHT+HT)
Bone pain: G3-4	Bone pain: G1-2
Visceral pain: G2-3	Visceral pain: G1
Fatigue: G2-3	Fatigue: G1-2
Nausea and vomiting: G2	Nausea and vomiting: G1
Bone marrow tox: G3-4	Bone marrow tox: G1-2

Tab.1

ID	Birth Date	Therapy
C. L.	25/08/1969	<i>Exemestane,</i>
C. C.	19/02/1947	<i>CMF, Docetaxel, Nolvadex, Enantone</i>
D.L.V.	01/05/1956	<i>Trastuzumab+CBDCA, Myocet+Gemcitabine</i>
C. P.	22/10/1956	<i>FEC, Trastuzumab, Vinorelbine, Capecitabine, Fulvestrant</i>
F. V.	15/03/1946	<i>Myocet+ Docetaxel, Myocet+Gemcitabine, Zoledronic Acid</i>
F.D.	20/08/1962	<i>Fulvestrant+Xeloda, CBDCA+TAX, NVB+GEM</i>
P.G.	11/12/1957	<i>Herceptin+NVB, Herceptin,Xeloda</i>
O.F.	14/09/1959	<i>Zometa+Tam</i>
M.D.	19/08/1956	<i>Xeloda+TXT+BEVA,CBDCA+GEM, TAXOL, NVB, Myocet</i>
L.G.	28/08/1921	<i>TXT+Letrozolo</i>
P.D.A.	24/03/1961	<i>Herceptin+CBDCA, Myocet+Gemcitabina</i>
M.C.	19/94/1954	<i>FEC,CBDCA+GEM, Herceptin+NVB, Lapatinib+Xeloda</i>

Tab. 2

All patients underwent on average 30 cycles of capacitive hyperthermia, each consisting of eight daily 45-minute sessions, using 300W per session.

In these patients the improvement of performance status has allowed a return to regular life. This improvement of the quality of life showed a correspondent biochemical response, with a progressive reduction in tumour markers and showed also a diagnostic response with stabilization of the disease: in some cases reduction of size and/or number of metastases and in all cases with absence of metabolic activity disease (TB PET CT scan).

According to the studies on P.N.E.I.M (1, 6, 7), the results in the field of Clinical Pharmacology concerning drug abuse and medicines disuse, and the resulting recent studies in anthropology on cancer patients, all of our patients were treated at a preventive, therapeutic and post-treatment level with appropriate behavioural tests and drug treatments to avoid relapse. Clinical Pharmacology, in our opinion, considers every patient, following the multidimensional (bio-psychosocial) approach, as a global being (8, 9, 10, 11).

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