

## **EARLY PARTIAL RESPONSE IN METASTATIC BREAST CANCER TREATED WITH CHEMOTHERAPY AND CONCOMITANT RADIOFREQUENCY HYPERTHERMIA**

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Metastatic breast cancer is a chemosensitive disease. In fact, CHT regimens whether based on anthracycline (e.g. FAC) or methotrexate (e.g. CMF) produce 40-75% objective response rate with a median duration of response and survival of 6-12 months and 12-24 months, respectively. However, while these regimens frequently palliate the symptoms of disease, they do not substantially prolong the median survival nor result in the cure of patients.

More recently, taxane containing regimens showed to be the most active regimen in the treatment of metastatic breast cancer, but also with these regimens overall survival was only marginally improved. When patients relapse or show increase of metastatic lesion following first line chemotherapy, a 30-40% response is still achievable various drugs and regimens as second line treatment.

Theoretical advantage for the association of taxane with HT include the following: 1) synergism, else taxane increased cytotoxicity, 2) both of treatments posses relatively non-overlapping toxicities, 3) a good compliance of patients.

In this paper we present a case report of a 41 years old female patient in premenopausal state with diagnosis of metastatic breast cancer (MBC), treated by surgery (April 2003). chemotherapy (FEC), local radiotherapy (DTF 50+50 Gy) and ormonotherapy (tamoxifen 20 mg/die + zoladex 3.6 1fl q 28).

After treatment follow-up was free disease until November 2006, when a total body (TB) computed tomography (CT) scan showed multiple liver lesions of about 5 cm in maximum diameter.

The patient, in our department, underwent chemotherapy based on Paclitaxel 110 mg weekly for 3 weeks consecutively every 5 weeks, associated with 2 cycles of Radiofrequency Hyperthermia (RH), each consisting of eight 45-minute sessions every other day, using about 300 W per session. A successive TB 18FDG Positron Emission Tomography (PET)-CT scan documented absence of metabolic activity disease and a remarkable reduction of liver metastases in number and dimensions, confirmed by an abdominal ultrasonography (February 2007).

Weekly paclitaxel associated with local RH seem to be a promising treatment because this regimen has good efficacy and moderate toxicity.