

HYPERTHERMIA ASSOCIATED TO CHEMOTHERAPY WITH GEMCITABINE IN A CASE OF LUNG METASTASIS FROM A THIGH SARCOMA

G. Di Fede, V. Ghezzi
Istituto di Medicina Biologica, Milano, Italy

Introduction

Hyperthermia is a non invasive therapy that permits to increase the cytotoxic effect of some chemotherapical drugs such as gemcitabine without any side effects increasing.

The gemcitabine is an antimetabolitic similar to pyrimidine that inhibites the DNA synthesis during the S phase of the cellular cycle. It is used in the monotherapy of both local advanced and metastatical NSCLC lung cancers and for pancreatic neoplasias.

The association hyperthermia/gemcitabine can be specially effective in particularly aggressive neoplasias that had yet been treated with polychemotherapies.

Materials and Methods

The present case is that of a 42 years old patient affected by a sarcoma at the left thigh that has been operated on June 2002 and relapsing on 2003. He is operated again and has 4 sessions of chemotherapy (epiadriamicine, lifosfamyde) until September 2003.

On May 2004 a toracical TC reveals 4 metastasis in both lungs, having a maximum diameter of 16mm.

The patient has another two sessions of chemotherapy (ifosfamyde (1gr/mq) and the therapy is stopped as the disesase increases: on 31.8.04 a toracical radiography shows that the metastatical lesions enlarged. The biggest lesion is under the right hilus region and is 66x50mm.

On September 2004 the patient starts hyperthermia in association with gemcitabine.

Results

After the hyperthermia-chemotherapy sessions a toracical radiography (4.11.04) shows a reduction fo the lingular lesion to 26x21mm and a no-change of the other lesions. The situation kept the same during the following 6 months.

TC SCAN date	10 May	31 August	14 October	4 November
Lingular lesion	16 x 16 mm	28 x 25 mm	29 x 31 mm	26 x 21 mm
Right inferior Lobe lesion	16 x 16 mm	66 x 50 mm	70 x 66 mm	unchanged

Conclusions

Our case-report shows the efficacy of hyperthermia in the treatment of soft tissues previously treated with polichemotherapy.