CHEMOTHERAPY COMBINED WITH REGIONAL HYPERTHERMIA IN LOCALLY ADVANCED UNRESECTABLE PANCREATIC CANCER: CLINICAL AND ANTHROPOLOGICAL BENEFITS.

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The latest medical studies on pancreatic adenocarcinoma show a remarkable increase in incidence, prevalently in the western countries.
Recent medical studies have pointed out that there is a correlation between pancreatic tumours and high-fat diets; the influence of coffee intake is debated. In general, obstructive icterus and pain associate to the involvement of retroperitoneal nerve fibres are symptomatic of head and body tumours. Frequently a poor digestion, as a consequence of a bad state of the pancreatic enzymes synthesis, brings about taking off weight. Unfortunately the prognosis of this kind of neoplasia is unfavourable, patients are likely to survive less than 12 months. Many of this kind of neoplasia are inoperable and often a treatment with chemotherapy and radiotherapy is not successful. The treatment with capacitive hyperthermia (HT) shows antitumoral effects associate with a chemotherapy (CHT) treatment consisted of gemcitabine (GEM) alone or in association with oxaliplatin, cisplatin, or 5-FU (1,2,3,4,5). This treatment utilizes a modern and functional apparatus so that the patients have a good ability to tolerate it because of the short incidence of complications.

The aim of this study was to evaluate the action of CHT associated with regional Hyperthermia (HT) tested on a group of 25 patients suffering from locally advance unresectable pancreatic carcinoma (LAPC).

MATERIALS AND METHODS

APPARATUS: We used an RH equipment at 13.56 MHz endowed with liquid-cooled flexible antennas.
PERIOD: from 02/2001 to 07/2009.

TREATMENT: 3 cycles of treatment, every cycle is structured in 8 sessions of 45 minutes each on alternate days.

PATIENTS: a group of 25 patients suffering from locally advanced unresectable pancreatic cancer (12 male and 13 female).

RESULTS

Median overall survival (OS) was 16 months in the group CHT+HT vs 8-11 months as reported in literature. We did not observe adverse effects or increase toxicity in CHT.

1. Survival 12th month: 19 pts - 76%
2. Survival 18th month: 12 pts - 48%
3. Survival 24th month: 11 pts - 44%
4. Survival over 24th month: 9 pts - 36%

CONCLUSIONS

Anticancer nucleoside Gemcitabine, Oxaliplatin and 5 FU have dose limiting toxicities (DLT) Major side effects of Gemcitabine include bone marrow suppression, flu-like syndrome and severe hepatic toxicity.(6,7,8,9,10)

The application of Regional Hyperthermia (HT) on this restricted group of patients has given very interesting results. The HT + CHT can reduce the tumour increase, can increase the survival of the patients and, above all, the HT can improve the general conditions of the patients that have been treated with this kind of combined therapy. The results justified further evaluation in a large number of patients to confirm the benefit.

The Hyperthermotherapy improved the quality of life of all responding patients.

Compared to the severe physical, existential and esthetic impact of the chemotherapy alone, patients with Hyperthermia do not experience particular side effects. As a consequence of that, patients are less anxious in facing the treatment; they establish a fruitful empathic relation with cares and doctors. So, the anguish proceeding the moment of cares (CHT) turns now into a necessary but not threatening and foreboding moment (11,12,13,14,15). Physiotherapy intervention, in its turn, has something to offer throughout the whole cancer journey, also for patients who are not curable and whose life is limited.

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