

RADIO-HYPERTHERMO-CHEMOTHERAPY FOR MALIGNANT FIBROUS HISTIOCYTOMA

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Purpose

We report here a good results of Radio-hyperthermo-chemotherapy (RHC) for the malignant fibrous histiocytoma(MFH) patients of the limbs.

Patients and Methods

We performed RHC for 34 patients with MFH of the limbs between 1992 and 2003. RHC is; Radiotherapy involved the delivery of radiation at a dose of 2 Gy once daily on 16 days to give a total dose of 32 Gy. Hyperthermia was conducted locally once a week, with a total of 5 sessions. The temperature was measured by inserting a hyperthermia needle into the tumor and inserting a thermocouple thermometer into the space. The objective of treatment was to achieve a temperature of 42.5 degrees centigrade or more for 60 minutes. Chemotherapy was performed by implanting a reservoir and administering cisplatin (90 mg/M) 3 times and Pirarubicin (25mg/M) twice by intra-arterial infusion at weekly intervals. These drugs were administered alternately during hyperthermia sessions. The patients were divided into 3 groups by the intra-tumoral temperature(ITT) during hyperthermia and evaluated the effectiveness of RHC histologically; 1) complete hyperthermia : ITT is more than 42 degrees centigrade 2) mild hyperthermia: ITT is between 40 to 42 degrees centigrade 3) poor hyperthermia : ITT is less than 40 degrees centigrade.

Results

The surgical margin was wide margin in 12 patients, marginal in 20 patients. There was two recurrence in these patients. The oncological results of the patients were that 21 patients were CDF , 5 were no evidence of disease, 1was alive with disease. 5 were dead of disease and 3 were dead of another cause. The complete hyperthermia group showed that the necrosis rate is more than 90%.

Discussion

RHC is one of the best neoadjuvant therapy for MFH of the limbs.