

HYPERTHERMIA AS TREATMENT OPTION IN HEPATOCELLULAR CARCINOMA (HCC)

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Treatment of inoperable hepatocellular carcinoma (HCC) remains a major clinical problem.

The only efficient treatment options are percutaneous ethanol injection, radiofrequency ablation and transarterial chemoembolisation, but these therapies are only practicable to patients with limited tumour spread and sufficient liver function. For patients with advanced

tumour and poor liver function a systemic therapy is required.

Somatostatin with antimetabolic activity in conjunction with regional deep hyperthermia is a controversial treatment option.

Patients and Method

From March 2004 up to October 2005, 10 patients (2 fem, 8 male, age 51-83 years) with inoperable HCC (UICC T2: 1pat, T3: 9pat.) underwent combined treatment consisting of somatostatin continuous intravenous application of 250 µg/h on day one, four and seven and 500 µg/h 60 min before and during regional deep hyperthermia treatment.

Hyperthermia was applied using the BSD 2000 sigma 60 applicator (Medical Corporation, Salt Lake City, Utah) at a frequency ranging between 60-120 MHz and 200 Watt over one hour treatment time at a temperature between 41.5-42.0 degree Celsius.

Results

Partial remission (PR) could be achieved in one patient (T3). Stable disease (SD) in seven patients (T2: 1, T3: 6) and tumour progression (PD) was seen in 2 patients (T3). In patients with two treatment cycles we have seen 2 patients (T3) with progressive disease and 1 patient (T3) with partial remission. The overall response rate in these patients was 70%.

We lost 2 patients within follow up 8 patients are still alive up to now.