

Local and whole body hyperthermia in chemoresistant ovarian cancer

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Introduction

The prognosis for patients with advanced ovarian cancer remains bleak. 5-year survival in stage III is 5-10%. Primary and acquired resistance of tumor cells to antineoplastic drugs is a major cause of the limited efficiency of chemotherapy. In our retrospective analysis we present the treatment results for patients with advanced ovarian cancer using whole body hyperthermia (WBH) in combination with a second line or palliative chemotherapy.

Methods

13 patients with pathologically verified epithelial ovarian cancer were eligible for the retrospective analysis (selection of patients was done in accordance with the following criteria: advanced ovarian cancer after surgical procedure and previous chemotherapy). Median patients age 53,7. Nine (69%) patients had had a relapse. Number of organs with evidence of disease: metastases in 1 organ by 3 (23%), 2 organs by 8 (61,5%) and 3 organs by 2 (15,4%) patients.

All patients received palliative chemotherapy during the WBH with a core temperature of 41.5° - 42°C).

Results

15,4% of patients showed a response to the therapy (1 CR, 1 PR). No change was noted in 7 patients (53,8%). The subjective status of the majority of the patients improved significantly three to four days after WBH. The tumor symptomatic subsided briskly. Ascites reduction was by four of the five patients clearly perceptible. Median Remission duration was 6,1 months. At the time of survival analysis, the median follow-up duration for all patients was 11,7 months (range 2,5 to 22). 7 of 13 patients died of disease relapse and one patient with diffuse liver metastases of liver insufficiency after chemotherapy.

Conclusion

Our results confirm the effectively of WBH in the treatment of patients with advanced ovarian cancer after extensive multiple chemotherapies: the response at 69,2% and remissions at 15,5% were registered. The overall tolerance of this treatment was good. Priority for all patients was an improvement in life quality, which was seen three to four days after WBH.