

Chemosensitivity directed systemic versus high concentrated regional chemotherapy for recurrent ovarian carcinoma

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Introduction :

In order to break through tumorcell resistance in recurrent ovarian carcinoma we used two different therapeutic strategies : regional application of cytostatics using a hypoxic abdominal perfusion (HAP) technique or chemosensitivity guided, individualized systemic chemotherapy using an ATP-bioluminescence assay.

Material and methods :

In a prospective, but not randomised study between 1/98 and 9/2000 28 consecutive patients were treated by two different protocols :

- Group A : abdominal perfusion (HAP) using a standardized chemotherapeutic regimen with Mitomycin 20 mg; CDDP 75 mg; Treosulfan 7,5 g*
- Group B : individualized systemic treatment plan guided by chemosensitivity test*

When ever possible, a second debulking laparotomy was carried out.

Results :

Both groups were well balanced in terms of age, Karnofsky-Index, UICC-stage and number of pre-treatments : Group A: 54,7 years, KI 77.8 ; stage IV 5/14 – Group B: 52,5 y; KI 82.8 ; stage IV 4/14. Chemotherapy induced side-effects were usually mild and transient and not related to special application form. Up to now 8 pts. have been died, 5 progressive disease, 1 septicemia, 1 small bowel obstruction, 1 postoperative complications after debulking procedure.

Response rates were as follows :

group A : CR 1 , PR 6, MR 2 , SD 3 , PD 2 (leading to 7 debulking operations)

group B : CR 1 , PR 7, MR 2 , SD 0 , PD 4 (leading to 8 debulking operations)

One year survival rate was 67 % in group A and 64 % in group B. Median survival was 19 months in group of pts. Treated with regional chemotherapy, whereas med. survival has not been reached in the other group.

Conclusion :

In recurrent, heavily pre-treated ovarian cancer patients it is possible to reach regression by high concentrated regional chemotherapy as well as by use of an individualized chemosensitivity test guided systemic chemotherapy. Both treatment options are very effective leading to a high remission rate. This opens the way for an effective second – debulking procedure.