HYPERTHERMIC INTRAPERITONEAL CHEMOPERFUSION IN COMBINED TREATMENT OF LOCAL-ADVANCED AND PERITONEAL DISSEMINATED GASTRIC CANCER

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Introduction: Patients with intraperitoneal disseminated gastric cancer (GC) have a poor prognosis despite systemic chemotherapy or palliative surgery. The aim of this study was to evaluate aggressive cytoreduction in combination with hyperthermic intraperitoneal chemoperfusion (HIPEC) as a novel treatment strategy for patients with intraperitoneal disseminated and locally advanced gastric cancer.

Methods: A total of 78 patients were included in the study, 39 patients with advanced gastric cancer were assigned to combination therapy with HIPEC and 39 patients received standard therapy.

Results: Combination therapy for serosa-invasive GC reduced the level of metachronous peritoneal carcinomatosis and increased median survival from 12 months to 22.5 months (p = 0.001). The median and 1-year survival rates for intraperitoneal disseminated GC patients undergoing therapy with the use of HIPEC were 12 months and 68.8% compared with 8 months and 25%, respectively (p = 0.004) for control subgroup patients (palliative chemotherapy). The independent prognostic factors in GC patients with peritoneal metastases undergoing combined treatment with HIPEC are the stage of peritoneal dissemination in compliance with the classification of the Japanese Gastric Cancer Association and the score of cytoreduction completeness.

Conclusion: HIPEC in an adjuvant regimen used to treat GC patients with a high risk of intraperitoneal progression allows reduction of peritoneal metachronous carcinomatosis and significantly improves patients’ survival advantage. Cytoreduction followed by HIPEC improves survival in patients with limited peritoneal carcinomatosis of gastric origin.