Hyperthermic intraperitoneal chemotherapy in ovarian carcinoma

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Background: Cytoreductive surgery combined with hyperthermic intraperitoneal chemotherapy (CRS+ HIPEC) has been proposed as treatment for recurrent epithelial ovarian carcinoma. We evaluated the outcomes of CRS+HIPEC in recurrent epithelial ovarian cancers, in Indian patients.

Methods: In this prospective non-randomized study between February 2013 & January 2015, 26 patients with advanced recurrent EOC, with no extra-abdominal disease treated with secondary CRS+HIPEC in a tertiary care cancer institution, Southern India, were analyzed. Belmonte® hyperthermia (HIPEC) pump with cisplatin 100 mg/m$^2$, 41.5-43°C for 90 minutes, in platinum sensitive cases & doxorubicin 15 mgs/m$^2$+cisplatin 75 mgs/m$^2$ in platinum resistant cases was used.

Results: Among twenty six patients 18 were upfront & 8 were post chemotherapy. Median peritoneal carcinomatosis Index was 9.5 (Range 3-19). The extent of cytoreduction associated with longer hospital stay (p<0.001), delayed gastrointestinal recovery (p=0.039), infections (p=0.036), and ARDS (p=0.041). Completeness of cytoreduction score CC0 achieved in 24 and CC1 in 2 patients. Bowel resection required in 34.6%. Diaphragm stripping was required in 30.7% with resection in 7.6%. Median hospital stay was 12 days (range: 10-42 days). No 30 days mortality. Bowel fistula happened in 7.6% cases requiring re-exploration, temporary stomas, and wound related complications in 26%. At median follow-up of eighteen months, 11.5% recurrences (both platinum resistant cases recurred in peritoneal cavity and one patient also in liver parenchyma) and one platinum sensitive patient recurred isolated in peritoneal cavity. One death observed at 5th month of follow up due to pulmonary embolism.

Conclusions: In our Indian study, secondary CRS+HIPEC is shown to be very promising in recurrent epithelial ovarian cancers patients with no extra-abdominal disease & good performance status and can be done with acceptable morbidity, using dedicated HIPEC machine resulting in good peritoneal control of disease & DFS.

Biography

Somashekhar S P, MS, MCh (Onco), FRCS, Edinburgh, is the Chairman & HOD of Surgical Oncology, Manipal Health Enterprise. He did his graduation in the year 1994, MS and MCh oncnsurgery in the year 2000. He did his FRCS in Edinburgh. He is the Editor in Chief of Indian Journal of Gynec Oncology. Treasurer Association of Gynecological Oncology India. He is the Consultant Surgical & Gynec. Onco & Robotic Surgeon at Manipal Comprehensive Cancer Center, India. He had several national and international publication and has authored several text books in gynec oncology.

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