

Survival Benefits of Redo Cytoreductive Surgery with Hyperthermic Intraperitoneal Chemotherapy in Patients with Recurrent Peritoneal Carcinomatosis

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Introduction: CRS/HIPEC has shown to improve overall survival (OS) in patients with peritoneal carcinomatosis (PC). Recurrence after CRS/HIPEC is a common problem and poses a management dilemma.

Methods: Patients with recurrent PC (2011-2019) who underwent a second CRS/HIPEC were examined prospectively. Postoperative morbidity, mortality, and overall survival were analyzed.

Results: Of 220 patients, 9 were identified: median age 60 (41-71) at second procedure, 6 females, 3 Hispanic, and all with ASA score 3. Primary tumors included: 6 appendiceal, 2 colorectal, and 1 pseudomyxoma peritonei. Median interval between the procedures was 37 months (8-67). Median peritoneal cancer index was 15 (6-21) and 10 (6-23) with completeness of cytoreduction score of 0 in 89% and 100% during first and second CRS/HIPEC, respectively. Mean length of hospital stay was 8 (6-9) and 11 (7-120) days, with mean ICU admission of 3 (1-5) and 3.5 (2-40) days. There was no 30-day or inpatient mortality. Postoperative complications were: 3 intra-abdominal abscess and one each of anastomotic leakage and fistula, wound dehiscence, and iatrogenic pneumothorax. Mean disease-free interval between first procedure and recurrence was 18.8 months (3-65), whereas median disease-free survival was 21 months post second CRS/HIPEC. With median follow-up of 19 months, seven patients are alive (three with no evidence of disease), while two patients are deceased.

Conclusion: Seemingly safe and feasible, repeat CRS/HIPEC should be considered in selected patients with recurrent PC. Proper postoperative care and careful patient selection may reduce the risk of complications.