

Is Hyperthermic Intraperitoneal Chemotherapy (HIPEC) Safe in Septuagenarians?

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Introduction: Cytoreductive surgery (CRS) with HIPEC is increasingly used for gastrointestinal and gynecological peritoneal surface malignancies (PSM). Yet, most current guidelines do not recommend CRS/HIPEC in elderly patients as survival outcomes are still unclear.

Methods: Patients 70 yo or older with PSM were prospectively included (2011-2019). Postoperative morbidity, mortality, and overall survival were analyzed.

Results: Of 220 patients, 10 were identified: median age 73.9 years (70-83), 6 females, 4 Hispanic, all with ASA score 3. Primary tumors were appendiceal (30%), mesothelioma (20%), intestinal (20%), gastric (10%), and unknown primary (20%). Mean length of operation was 8.9 hours (7.6-10.5). Mean EBL was 530mL (100-2000), with 6 patients receiving blood transfusion. Mitomycin-C was most commonly used (70%), then oxaliplatin (20%) and cisplatin (10%). Median Peritoneal Cancer Index (PCI) was 6.8 (3-18) and 8 patients achieved a completeness of cytoreduction (CCR) score 0. Mean length of hospital and ICU stays were 18 (6-70) and 7.8 days (2-38), respectively. Postoperative complications included: 4 pleural effusions requiring drainage, one anastomotic leakage and fistula, and one deep vein thrombosis. The median follow up was 11 months and 1-year overall survival rate was 100%. Four patients are alive with no evidence of disease, two with progression and one stable disease, while 3 patients are deceased.

Conclusion: CRS/HIPEC seems to be safe and feasible in elderly patients with PSM. Careful patient selection can reduce risk of complications. Given a rapidly aging population and limited literature, further studies are required to elucidate better predictors of outcomes in this population.