Clinicopathologic Factors Associated with Readmissions and ED Visits after Cytoreductive Surgery and Hyperthermic Intraperitoneal Chemotherapy (CRS-HIPEC)

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Introduction. Peritoneal surface metastases (PSM) treated with systemic chemotherapy alone rarely result in long-term survival. Cytoreductive surgery and hyperthermic intraperitoneal chemotherapy (CRS-HIPEC) is important in treating PSM. Considered the ultimate major abdominal operation, it often requires multiple peritonectomies and multi-visceral resections followed by direct application of high-dosed hyperthermic chemotherapeutic agent(s), each with its own side-effects. Recovery can be difficult, often requiring readmissions and ED visits after discharge. This study analyzes clinicopathologic factors contributing to ED visits and readmissions up to 90 days after CRS-HIPEC.

Methods. Patient records from a comprehensive HIPEC databank from 2018-2022 were analyzed.

Results. 216 patient records were analyzed, which included 62.5% females, average age of 56.8 years. Most patients were ASA 3, ECOG 0, with an average peritoneal cancer index (PCI) of 11.5 (0-39). Mean length of stay (LOS) was 10.6 days. Ninety-day mortality equaled 1.4%. Approximately 89% of patients went home, 10% to transition care, and 1% to hospice. Average number of organs removed were 2.6; bowel was the most common (56%). 32% of all patients required readmissions, via the ED or other means, most within 30 days, average 25.5 days. 10.6% had >1 admission. Only 16.7% visited the ED. Factors significantly (p<0.05) associated with readmissions included: LOS, discharge to transitional care facility, history of diabetes, ASA class, high PCI, complete RUQ peritonectomy, cholecystectomy, splenectomy, and bowel resection (most notably low anterior resection).

Conclusions. Specific clinicopathologic factors need to be considered and targeted to improve readmissions and ED visits.

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