

Cytoreductive Surgery and Hyperthermic Intraperitoneal Chemotherapy for the Treatment of Peritoneal Carcinomatosis: Our Initial Experience

Adrian Bartoș¹, Dana Bartoș^{1,2}, Stoian Raluca^{1,2}, Călin Mitre³, Adina Hadade³, Ioana Iancu¹, Cristian Cioltean¹, Cornel Iancu^{1,4}, Claudia Militaru⁵, Angela Părau⁶, Caius Breazu³

¹Regional Institute of Gastroenterology and Hepatology, Department of Surgery, Cluj – Napoca, Romania

²“Iuliu Hațieganu” University of Medicine and Pharmacy, Anatomy and Embryology Department, Cluj – Napoca, Romania

³Regional Institute of Gastroenterology and Hepatology, Department of Anesthesiology and Intensive Care, Cluj – Napoca, Romania

⁴“Iuliu Hațieganu” University of Medicine and Pharmacy, Department of Surgery, Cluj – Napoca, Romania

⁵“Iuliu Hațieganu” University of Medicine and Pharmacy, Pharmacology, Toxicology and Clinical Pharmacology Department; Medisprof Clinic, Cluj – Napoca, Romania

⁶Regional Institute of Gastroenterology and Hepatology, Department of Oncology, Cluj – Napoca, Romania

Abstract

Introduction: Peritoneal carcinomatosis represents an advanced stage of tumor dissemination of abdominal cancers in general and colorectal cancer in particular. The only therapeutic methods currently available for the treatment of this pathology are systemic chemotherapy (palliative character) and cytoreductive surgery (CR) with intraperitoneal chemotherapy. After evaluation of evidence-based medical literature and current guide lines we can state that CR + HIPEC procedure is considered to be the treatment of choice in case of patients with peritoneal carcinomatosis of colorectal, ovarian and mucinous appendicular origin.

Material and method: In the present study we prospectively analyzed the immediate postoperative results obtained in the first 50 patients that were treated by our team for peritoneal carcinomatosis of different origin. We described the protocol of selection, the patients characteristics that were included in our CR+HIPEC program and analyzed the complications and death rate.

Results: From January 2015 till Dec 2018 we evaluated 98 patients with peritoneal carcinomatosis. From them, 51 received radical CR+HIPEC treatment, 33 were not suitable for surgery because of the exclusion criteria's and 15 had only exploratory laparotomies. In regard with the histopathological diagnosis, 30 patients had ovarian cancer and 19 had colorectal cancer or peritoneal pseudomixoma of appendicular origin. There was no 30 days postoperative mortality. The incidence of significant postoperative complications was 15%.

Conclusions: Cytoreductive surgery followed by hyperthermic intraperitoneal chemotherapy is a complex technique accompanied by an acceptable rate of complications and postoperative deaths, the results being optimized by a standardized perioperative management and patient selection. The initial results obtained by our team emphasize the feasibility of this procedure, with immediate good results, as a result of a standardization protocol of patient selection and perioperative care.

Key words: peritoneal carcinomatosis, colorectal cancer, ovarian cancer, pseudomyxoma peritonei, hyperthermic intraperitoneal chemotherapy, multiorgan resections