

# **Cytoreductive surgery and Hyperthermic IntraPeritoneal Chemotherapy (HIPEC) for treatment of peritoneal metastasis of colorectal origin**

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for treatment of peritoneal metastasis of colorectal origin**

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**Background:** Peritoneal metastasis from colorectal cancer (CRC) has been considered incurable and uniformly fatal disease, treated only for palliation. The recently developed concept of cytoreductive surgery and hyperthermic intraperitoneal chemotherapy (HIPEC) was proven to be effective for some of the patient with limited tumor burden with 5-year survival rates of up to 30%. However, few centers worldwide utilize this method mainly because it is time and resources consuming, and the reported high mortality and morbidity in some studies.

In the last year, we started to perform this procedure to treat colorectal peritoneal metastases in our department.

The purpose of this study is to evaluate the initial results of Cytoreductive Surgery and HIPEC in our department.

**Methods:** Between April 2009 and December 2011 , 45 consecutive CRC (including appendix) patients were operated and underwent Cytoreduction and HIPEC for peritoneal metastatic.

Using median laparotomy the abdomen was explored and all tumor deposits documented. The aim was to remove all visible tumors. If complete Cytoreduction was achieved, HIPEC was performed. We perform the HIPEC using the Coliseum (Sugarbaker) technique. The drug of choice in CRC is Mitomycin-C 20mg/m<sup>2</sup>, at 41<sup>0</sup>.

**Results:** The main age of the patients was 64.54 years (31-80). 37 had CRC and 8 had Appendiceal tumors. All CRC patients were heavily pre-treated with chemotherapy. Disease evaluation included PET-CT in all patients. All patients were presented in surgical-oncological conference. The mean operative time was 6/75 hours, and mean hospital stay was 10 days.

Complete Cytoreduction was achieved in most patients. 30 patients had bowel resection and in most of them anastomosis was done. 3 patients had stoma at the end of surgery, 2 of them had protective ileostomy and one with end colostomy.

There was no mortality . Major complications reported in 31% patients: anastomotic leak , pelvic abscess , wound infection, and reoperation because of sepsis and respiratory failure in 1 patient.

The mean follow up time was 13 months. During which 13 patients died resulting in mean overall survival of 24.p months.

**Conclusion:** Cytoreductive surgery and HIPEC is a feasible procedure for treating peritoneal CRC metastasis. The procedure is long, complicated and not devoid of morbidity. Therefore it should be performed after careful multidisciplinary selection of the patients and only in specialized centers. It offers patients with peritoneal carcinomatosis a chance for survival that resembles that of patients with liver metastases from CRC.