

INTRAPERITONEAL HYPERTHERMIC CHEMOTHERAPY (IPHC) FOR TREATMENT OF PERITONEAL CARCINOMATOSIS.

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Background: IPHC is a new surgical approach in the treatment or in the prevention of peritoneal carcinomatosis (PC).

Methods: We reviewed 39 IPHC procedures performed in 36 patients (17 males and 19 females). The mean age was 59 years (range 29-75). Most of the procedures were performed in the last three years. Indications for surgery were PC (n = 24) or primitive cancer (no PC) at high risk for peritoneal recurrence (n = 15) (most gastric cancer with serosal invasion). Types of cancer were: gastric (14), colorectal (9), sarcoma (9), ovary (3), pseudomyxoma peritonei (2), hepatocarcinoma (1) or mesothelioma (1). The aim of surgery was to remove the primary cancer and to achieve complete cytoreduction of the PC before the IPHC was performed. Liver metastases were associated to PC in 6 patients. IPHC was performed in a closed circuit with open abdomen during 90 minutes. Temperature of the intraperitoneal fluid during IPHC was 42.5°C.

Results: Mean operative time was 8h42 (range 5h10-18h55). Complete cytoreduction of PC was achieved in all but three cases. Associated procedures were total gastrectomy (17), left pancreatectomy (4), splenectomy (11), colectomy (11) and cholecystectomy (9). Liver metastases were resected or treated with radiofrequency in all but one case. Surgery was complete in 35 cases (90%). IPHC had to be interrupted in three cases (7.7%) because of too high central temperature (2) or leak of IP fluid into pleural cavity (1). There was 8 postoperative complications (20.5%): anemia (1), evisceration (1), prolonged ileus (2), duodenal fistula (1), acute pulmonary edema (1), acute renal insufficiency (1) and prolonged urinary retention (1). Most were not related to the IPHC procedure but to the extent of surgery. Mortality rate was 2.6% (1 patient with duodenal fistula). Median survival (23.0±6.8 months) of the whole series was not reached yet at follow-up. Among the 35 patients treated in a curative intent, 9 recurred (25.7%). Three of them did not develop any peritoneal recurrence and are still alive 1, 19 and 25 months after surgery.

Conclusion: In our series, IPHC was associated with a low mortality and morbidity rate. Although the follow-up of our patients is short, IPHC seems to be interesting in the treatment or the prevention of PC.