

FEASIBILITY OF PERITONECTOMY ASSOCIATED WITH INTRAPERITONEAL HYPERTHERMIC PERFUSION IN PATIENTS WITH PSEUDOMYXOMA PERITONEI

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Aims and background: Pseudomyxoma peritonei is a rare disease characterized by a complete redistribution of mucin within the peritoneal cavity. It can be classified into three histologic groups: disseminated peritoneal adenomucinosis, peritoneal mucinous carcinomatosis, and an intermediate group. The aim of the present study was to evaluate the feasibility of cytoreductive surgery requiring peritonectomy procedures associated with intraperitoneal hyperthermic perfusion, a technique that combines hyperthermia and high drug doses administered locally.

Methods: Twenty-seven patients with pseudomyxoma peritonei (19 males and 8 females) were enrolled in a phase II clinical trial. Twenty-two cases underwent cytoreductive surgery plus intraperitoneal hyperthermic perfusion, and 6 received debulking surgery only. One patient was operated on twice for disease recurrence. All patients with peritoneal mucinous carcinomatosis presented serous ascites, whereas all but one patient with disseminated peritoneal adenomucinosis or in the intermediate group presented mucinous ascites. Cytoreductive surgery was performed with peritonectomy procedures. The closed abdomen technique was adopted for intraperitoneal hyperthermic perfusion using a preheated poly-saline perfusate containing cisplatin (25 mg/m²/L) plus mito-

mycin-C (3.3 mg/m²/L) through a heart-lung pump at a mean flow of 600 mL/min for 60 mins from the hyperthermic phase (42.5 °C).

Results: All but one of the patients with disseminated peritoneal adenomucinosis and 2 of the 3 patients in the intermediate group were optimally cytoreduced. Patients with serous ascites (all patients with peritoneal mucinous carcinomatosis and 1 patient with disseminated peritoneal adenomucinosis) were considered ineligible for treatment because of tumor diffusion. The morbidity rate was 22%. There was one case of treatment-related mortality 30 days after treatment.

Conclusions: The following conclusions can be drawn from this phase II clinical trial: 1) patients with pseudomyxoma peritonei originating from undifferentiated mucinous adenocarcinoma (peritoneal mucinous carcinomatosis), with complete distribution into the peritoneal cavity, are not eligible for the cytoreductive surgery plus intraperitoneal hyperthermic perfusion technique; 2) the presence of serous ascites would seem to exclude patients from the treatment; 3) cytoreductive surgery associated with intraperitoneal hyperthermic perfusion is the most suitable approach for patients with disseminated peritoneal adenomucinosis and in the intermediate group.

Key words: intraperitoneal hyperthermic perfusion, peritonectomy, pseudomyxoma peritonei.