Cytoreductive Surgery with Hyperthermic Intraperitoneal Chemotherapy in the Management of Intractable Ascites Secondary to Peritoneal Surface Malignancies

Introduction:
Despite better systemic control of metastatic disease, intractable ascites remains a morbid condition in patients with peritoneal carcinomatosis. As the fluid becomes loculated, the intervals between paracentesis and the amount of fluid drained significantly decreases with a negative impact on Quality of Life.

Materials and Methods: We reviewed our records on patients with Peritoneal Surface Malignancies from January 2005 to August 2006. There were 65 patients. After all surgical resections were completed, we performed a hyperthermic intraperitoneal perfusion with Mitomycin C at 42 degree Celsius for 90 minutes via the closed technique. Intraoperatively, we documented the presence or absence of ascites. We also recorded whether they required preoperative and / or postoperative paracentesis.

Results: Ascites was documented in 31 (48%) of the 65 patients. Seventeen (55%) had at least 2 liters of ascites drained during surgery. Mean age was 63. Fourteen patients had appendix cancer, 2 had colon cancer, and 1 had peritoneal mesothelioma. The average amount of ascites was 4.5 liters (2 to 15). Twelve of the patients required preoperative paracentesis. Mean follow up was 8 months (2 to 19). Only 1 (0.6%) patient has required a postoperative paracentesis. Table 1.

Conclusion:
In patients with intractable ascites secondary to Peritoneal Surface Malignancies, Cytoreductive Surgery with HIPEC can have a meaningful impact on the need for repeated paracentesis, improving the patient's Quality of Life. This group of patients should be referred to a Peritoneal Surface Malignancy Center as part of the initial multidisciplinary treatment approach.

Table 1.

Patient	Ascites Drained at Surgery	Previous Paracentesis	Pathology	F/U (months)	Status	Further need for Paracentesis
1	2000 cc	Yes	Appendix	19	AWD	No
2	4100 cc	Yes	Appendix	19	AWD	No
3	3400 cc	Yes	Appendix	16	AWD	No
4	2000 cc	No	Appendix	15	AWD	No
5	2000 cc	Yes	Appendix	12	AWD	No
6	3700 cc	Yes	Colon	6	DOD	No
7	7500 cc	Yes	Appendix	8	AWD	Yes
8	2500 cc	Yes	Colon	4	AWD	No
9	3000 cc	Yes	Appendix	8	AWD	No
10	4000 cc	No	Appendix	7	AWD	No
11	6000 cc	No	Appendix	2	DOD	No
12	15000 cc	Yes	Appendix	5	AWD	No
13	3000 cc	Yes	Appendix	4	AWD	No
14	3000 cc	No	Appendix	4	AWD	No
15	6000 cc	Yes	Mesothelioma	3	AWD	No
16	7000 cc	Yes	Appendix	3	AWD	No
17	2000 cc	No	Appendix	2	AWD	No