



Memorial Sloan-Kettering
Cancer Center

Update

IN GYNECOLOGIC ONCOLOGY

MSKCC HIGHLIGHTS FROM THE SOCIETY OF GYNECOLOGIC ONCOLOGISTS'
2009 ANNUAL MEETING ON WOMEN'S CANCER

The Incidence of Major Surgical Complications After the Performance of Extensive Upper Abdominal Surgical Procedures During Primary Cytoreduction of Advanced Ovarian, Tubal, and Peritoneal Carcinomas

DENNIS S. CHI, MD
GYNECOLOGY SERVICE, DEPARTMENT OF SURGERY

Of the estimated 25,000 American women diagnosed each year with primary ovarian, fallopian tube, or peritoneal carcinoma, the majority present with advanced-stage disease. For these patients, standard initial therapy consists of cytoreductive surgery followed by combination taxane and platinum-based chemotherapy [1]. Numerous studies have demonstrated a survival advantage for patients who undergo "optimal" versus "suboptimal" primary surgical cytoreduc-

tion. A modified approach included diaphragm peritonectomy and/or resection, splenectomy, distal pancreatectomy, partial liver resection, cholecystectomy, and resection of tumor from the porta hepatis in cases where the primary surgeon deemed them necessary to achieve optimal cytoreduction. We reported that this paradigm shift led to an increased rate of optimal primary cytoreduction without increasing the rates of major complications or length of hospital stay. However, this initial study eval-

uated the rate of complications in all patients undergoing cytoreduction during this time period, not specifically only those who underwent extensive upper abdominal surgery.

In our current study, we used our prospectively maintained database to identify all patients with stage IIIC and IV ovarian, fallopian

tube, and peritoneal carcinoma who underwent primary cytoreduction at our institution between January 1, 2001 and December 31, 2006. We included only patients who underwent extensive upper abdominal procedures in an effort to achieve optimal cytoreduction. Our objective was to assess the morbidity and mortality associated with these procedures, whether optimal cytoreduction was

achieved or not.

One hundred forty-one patients met the study inclusion criteria. The majority of patients had stage IIIC disease, 103 (73%); grade 3 tumors, 122 (86%), serous histology, 131 (93%); and ascites at presentation, 118 (84%). Cytoreductive outcome included the following: no gross residual, 42 (30%); residual ≤ 1 cm, 85 (60%), and residual >1 cm, 14 (10%). Complications were graded on a 1-5 scale based on a published institutional scoring system. Grade 3-5 complications, the focus of this study, were those that led to invasive radiologic intervention, reoperation, unplanned ICU admission, chronic disability, or death within 30 days of surgery.

Thirty-one patients (22%) had grade 3-5 complications, including 2 (1.4%) mortalities within 30 days of surgery. Of the 31 grade 3-5 complications, 21 (68%) were managed by placement of percutaneous drains for infected or non-infected collections. With a median follow-up for surviving patients of 38 months (range, 3-68 months), the median overall survival for the 141-patient cohort was 57 months, and the 5-year overall survival was 49% (Figure 1). There were two mortalities within 30 days of surgery for a postoperative mortality rate of 1.4%.

REFERENCES

1. Armstrong DK, Bundy B, Wenzel L, et al. Intraperitoneal cisplatin and paclitaxel in ovarian cancer. *N Engl J Med* 2006;354:34-43.
2. Winter WE, Maxell GL, Fian C, et al. Prognostic factors for stage III epithelial ovarian cancer: a Gynecologic Oncology Group study. *J Clin Oncol* 2007;25:3621-27.
3. Chi DS, Eisenhauer EL, Lang J, et al. What is the optimal goal of primary cytoreductive surgery for bulky stage IIIC epithelial ovarian carcinoma? *Gynecol Oncol* 2006;103:559-64.

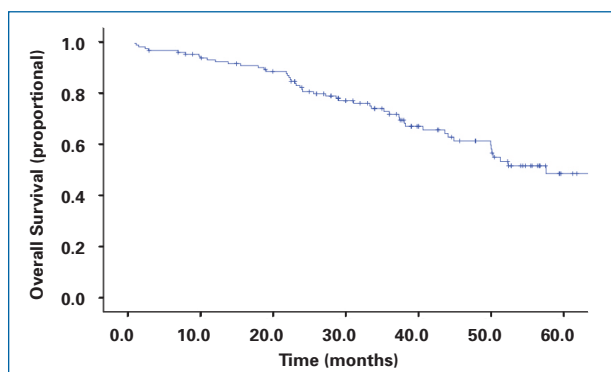


Figure 1. Overall Survival for Entire 141-patient cohort

tion, or "debulking" [2, 3]. Our service defines optimal cytoreduction as no residual tumor nodule measuring >1 cm in maximal dimension at the end of the surgical procedure.

In an attempt to improve our optimal cytoreductive rates, in January 2001, we expanded our surgical efforts by incorporating extensive upper abdominal surgery into the primary cytoreductive effort. The