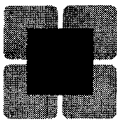

Cytoreduction in ovarian cancer: worth the risk?

APPROXIMATELY 19,000 new cases of ovarian cancer will be diagnosed this year, representing 25% of all gynecologic malignancies detected. Of women dying of gynecologic malignancies in 1988, 14,000 (50%) will die of ovarian cancer. Today's standard of care will provide long-term survival for only 20%–30% of patients with this malignancy. Only 10 years ago, the survival rate was 10%–15%. The 10% increase may seem meager, but it translates to 1,400 more patients per year. Three main factors have led to this improved survival:

1. Greater knowledge of the principles of surgical staging and surgical management of ovarian cancer patients,
2. Development of cis-platin–based chemotherapy, and
3. Recognition that ovarian cancer is no longer the purview of the gynecologist but is better managed in a tertiary care center by a team consisting of a gynecologic oncologist, medical oncologist, and radiation therapist.

■ *See also Seifer et al (pp 555–560)*

In 1975, Dr. Griffiths presented a classic paper demonstrating the relationship of survival to residual carcinoma at the termination of primary surgery.[1]

In this initial study, there were 102 patients with Stage II and III ovarian cancer. The mean duration of survival for patients with no residual disease was 39 months. The survival curve decreased almost linearly as a function of residual tumor size. Patients with residual masses measuring more than 1.5 cm had a mean survival of only 11 months. The longest survival was 26 months.

This issue of the *Cleveland Clinic Journal of Medicine* presents the experience at the Cleveland Clinic with 79 consecutive patients who had Stage III and IV ovarian carcinoma and underwent primary cytoreductive surgery at the Clinic between 1975 and 1985.[2] There was a significant difference in survival duration and absolute survival between the patients in whom optimal cytoreduction was achieved and those in whom this goal was not obtained. Survival in the optimal group was 30% from 20 months to eight years. Only 7% of patients in the suboptimal group survived during a follow-up range of 16–37 months. When other factors are controlled, residual tumor mass remains a significant independent variable.

This study is important, not because it reaffirms survival duration as a function of residual tumor mass, but because of the large number of consecutive patients treated in the same institution under the same protocols. The resulting data are usually difficult to obtain and certainly add credence to the findings in this and other smaller studies.

Of further significance is the demonstration of no difference in surgical morbidity or mortality between the optimal and suboptimal groups. This is reassuring because the surgical procedures necessary to obtain optimal cytoreduction may be complicated and arduous. Large- and small-bowel resection, as well as limited urinary tract resections and colostomies, proved to be safe in this group of patients despite the presence of residual tumor.

Ovarian cancer presents as a disseminated disease in approximately 70% of patients diagnosed. The advent of cis-platin combination chemotherapy, with response rates ranging from 60%–80%, has certainly contributed to the survival of these patients. However, it is not enough to provide significant long-term survival only. Aggressive primary cytoreductive surgery "converts" some of these responders to potential cures.

What is the cost of this surgery in terms of quality of life? As this study shows, there is no difference in surgical morbidity or mortality among the groups. Blythe and Wahl,[3] in a study of 36 patients, found that 75% of patients who underwent primary optimal cytoreduction

reported their quality of life as good or good to fair. Only 18% of patients who underwent suboptimal cytoreduction reported an equivalent quality of life. No patients reported better quality.

As Seifer et al point out in their paper, until better methods of chemotherapy and/or radiotherapy become available, primary surgical cytoreduction will remain the main initial therapy for these patients.

At present, treatment of ovarian cancer should be done in referral institutions fully equipped to manage the extensive surgical and postoperative complications. The advantages of collaboration between gynecologic oncologists, medical oncologists, and radiation therapists cannot be overemphasized. There is no room for "open-and-close" surgery in ovarian cancer patients. Decisions concerning the resectability of an ovarian carcinoma should be made by the most experienced professionals trained in the surgical management of ovarian carcinoma.

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