The Future Direction of Gynecologic Oncology: Treatment in the New Millennium

This publication focuses on the most common gynecologic cancers: ovarian, uterine/cervix, and endometrium. As with most cancer studies and reviews, the emphasis is necessarily on early detection modalities, effective treatments, and prophylaxes. These three distinct cancers affect a significant population base. It is imperative that data continue to be gathered on total management of these cancers.

On the prophylaxis realm of ovarian cancer, genetic testing is critical. The first article, by Thomas Frank, MD, emphasizes the fact that one out of 10 cases of ovarian cancer derives from an inherited gene mutation. A majority of hereditary ovarian cancers can be linked to BRCA1 and BRCA2 genes. Once a woman has been shown to have these genes, she is far more likely to develop epithelial malignancy of the ovary. Patients with early-onset breast cancer may carry the mutated gene, which will place them at a significantly increased risk of developing ovarian cancer. Some clinicians believe all patients with early-onset breast cancer should be genetically tested to evaluate the risk for ovarian cancer. There is a dramatic increase in cases of ovarian cancer with BRCA1 and BRCA2 mutations when women have already been diagnosed with breast cancer. Thorough history should be obtained from the patient to accurately pinpoint genetic susceptibility. At the present time, genetic testing remains cost prohibitive for large segments of the population. However, as insurance carriers are educated to the impact of this test and as technology advances bring the cost down, more patients will have access to testing.

At the point of most prevalent detection of ovarian cancer, metastasis to the abdominal cavity has already occurred. This metastasis is the main reason for high morbidity/mortality in these women. The development of a vaccine in the treatment of ovarian cancer has been investigated for many years. As Cheryl Butts, MS, and Ralph Freedman, MD, PhD, note in their article, the tumor vaccines currently used stimulate antitumor immune responses and also work with cytokines. The full efficacy of these vaccines remains to be determined. Clinical trials are underway and the results have been varied. Currently, no definite recommendations can be made for practitioners, but this novel concept deserves attention, as it will ultimately affect patients and physicians in the future.

A number of clinical trials have been conducted with the objective of ascertaining the efficacy of irradiation alone vs irradiation plus a chemical modifier in the treatment of women with cervical carcinoma. Perry Grigsby, MD, reviews the results of some of the trials in the literature. Concurrent with this review, the NCI released an announcement involving five prospective, randomized trials demonstrating that irradiation combined with chemical agents is superior to irradiation alone. Survival improvement was shown in all five studies. These findings have changed the standard of care in the United States for locally advanced cervical cancer.

Denis Cavanagh, MD, and colleagues present a review of endometrial adenocarcinoma, which is the fourth most common cancer in women but has a 5 out of 6 diagnosed survival rate. It is the most common cause of cancer of the female genital tract. Appropriate staging is critical to the successful management of this disease. Largely due to the high survival rate and current stage I detectors, practitioners may undervalue the potential deadliness of adenocarcinoma of the endometrium. Consulting with a gynecologic oncologist is recommended because, as evidenced by the study, optimal treatment of early-stage endometrial carcinoma is not entirely delineated at this juncture. There is hope that a standard optimal plan will be formulated in the millennium.

The administration of chemotherapy for advanced gastric cancer is addressed by André Murad, MD, PhD. Gastric cancer, although not a gynecologic malignancy, is the second most common cancer worldwide. This report indicates that survival for patients with advanced gastric cancer using chemotherapy is improved, although slightly. The use of taxanes has shown some success, but further clinical trial evaluation is obligatory. There is no standard treatment for post-FAM combination chemotherapy. There is evidence of combined 5-FU and paclitaxel efficacy for advanced gastric cancer. As with all current and proposed trials, extensive studies must occur to demonstrate results that merit "standard" therapy.

I am optimistic that in the new millennium, cancer care will shift from traditional surgical and chemotherapeutic intervention to molecular and genetic therapies, through vectors and monoclonal antibodies.

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