Intraperitoneal (IP) chemotherapy is an effective yet underused treatment for women with newly diagnosed ovarian cancer that has been successfully removed surgically. These data now suggest that IP treatment may have a role in the postoperative setting for women who initially were treated with intravenous chemotherapy,” said Don Dizon, MD, FACP, ASCO Expert in ovarian cancer and moderator of today’s press briefing.

“Furthermore, this study provides reassurance for patients and providers that the carboplatin–based IP regimen is both effective and well tolerated with maintenance of quality of life. That said, we need to further define those who derive the greatest benefit from this approach and to identify better options for all women with ovarian cancer.”

CHICAGO – For some women with advanced ovarian cancer that was successfully treated surgically, delivering chemotherapy into the abdomen (intraperitoneal, or IP) as well as intravenously (IV) appears more effective than IV chemotherapy alone. For women who were initially treated with chemotherapy prior to surgery (eg., neoadjuvant therapy), the initial results from a randomized phase II trial show that 23.3% of women who received IP and IV chemotherapy had disease progression at nine months, vs. 42.2% of those who received IV chemotherapy alone.

The study will be featured in a press briefing today and presented at the 2016 American Society of Clinical Oncology (ASCO) Annual Meeting.

According to the authors, the proportion of women with ovarian cancer who receive neoadjuvant therapy prior to surgery is growing. An estimated 30–40% of all women with epithelial ovarian cancer will receive neoadjuvant chemotherapy in North America and Europe. Women who undergo optimal debulking surgery following this approach may now be candidates for IP/IV combination chemotherapy.
IP chemotherapy allows the delivery of higher doses of chemotherapy to the tumor, while sparing other parts of the body from side effects. Several prior randomized clinical trials showed that IP chemotherapy improved outcomes for certain women with ovarian cancer. However, this is the first randomized study to explore the benefit of IP chemotherapy among women who had received neoadjuvant (pre-surgery) chemotherapy.

“At this early time frame, we already see that women are doing better with IP chemotherapy, without a significant difference in toxicity,” said lead study author Helen Mackay, MD, Divisional Head of Medical Oncology and Hematology at the Sunnybrook Odette Cancer Centre in Toronto, Canada. “However, women should consider the side effects of IP and IV chemotherapy, as well as recovery from cancer surgery, when discussing this option with their doctors.”

About the Study

This randomized phase II trial compared the efficacy and side effects of two combination chemotherapy regimens in patients with stage IIB–IV epithelial ovarian cancer. The majority (82%) of women had stage IIIC disease (cancer spread into the intraperitoneal cavity).

In this study, 275 women received neoadjuvant platinum-based chemotherapy, followed by surgery to remove their ovarian cancer (sometimes called debulking). Following debulking surgery, 200 were randomly assigned to treatment with IV chemotherapy or an IV/IP regimen.

Key Findings

At nine months, 42.2% of women who received IV chemotherapy had disease worsening compared to 23.3% of those treated with IP/IV chemotherapy. The median progression-free survival was similar between the two groups – 11.3 months with IV chemotherapy and 12.5 months with the IV/IP regimen. The median overall survival was longer with IV/IP therapy than with IV therapy alone (59.3 months vs. 38.1 months), but the difference was not statistically significant.

"Although this randomized phase II trial was not statistically powered to evaluate survival, our results offer information on how to incorporate IP chemotherapy when women receive neoadjuvant chemotherapy followed by debulking surgery,” said Dr. Mackay. “The findings also offer supportive and additional information to the previous published adjuvant randomized trials that showed an improvement in overall survival when IP chemotherapy was given following initial optimal debulking surgery."

The rate of severe side effects was slightly lower among women who receive IP/IV chemotherapy (16% vs. 23%), but this difference was not statistically significant.

Next Steps

Prior research has suggested that some molecular subtypes of ovarian cancer are more sensitive to chemotherapy than others. The researchers plan to assess tissue samples collected during this study to see if certain biologic characteristics were associated with improved outcomes with IP vs. IV chemotherapy. “If we can identify the long-term survivors, we hope this will help us better predict who truly benefits from this approach,” said Dr. Mackay.

About Ovarian Cancer
In 2012, 239,000 women were diagnosed with ovarian cancer worldwide, and 22,280 new ovarian cancer diagnoses are expected in the United States this year. Due to lack of screening and specific symptoms, most women already have late-stage disease at the time of their diagnosis. Epithelial ovarian cancer is the leading cause of death from a gynecologic cancer in North America, with an estimated 14,240 deaths expected in 2016. The study received funding support from the Canadian Cancer Society Research Institute (CCSRI), Cancer Research, UK (CR UK) and NIH/NCI (US).

View the full abstract.

For Your Readers:

- Guide to Ovarian Cancer
- Understanding Chemotherapy
- Understanding Surgery
- Cancer.Net Blog


View the disclosures for the 2016 ASCO Annual Meeting News Planning Team.

ATTIBUTION TO THE AMERICAN SOCIETY OF CLINICAL ONCOLOGY ANNUAL MEETING IS REQUESTED IN ALL COVERAGE.

###

About ASCO:

Founded in 1964, the American Society of Clinical Oncology (ASCO) is committed to making a world of difference in cancer care. As the world’s leading organization of its kind, ASCO represents more than 40,000 oncology professionals who care for people living with cancer. Through research, education, and promotion of the highest-quality patient care, ASCO works to conquer cancer and create a world where cancer is prevented or cured, and every survivor is healthy. ASCO is supported by its affiliate organization, the Conquer Cancer Foundation. Learn more at www.ASCO.org, explore patient education resources at www.Cancer.Net, and follow us on Facebook, Twitter, LinkedIn, and YouTube.