Intraperitoneal Chemotherapy for Women With Ovarian Cancer: Nursing Care and Considerations

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Adjuvant treatment options for women with ovarian cancer following optimal surgical debulking traditionally have focused on IV taxane and/or platinum-based regimens. Combining intraperitoneal (IP) with IV therapy may offer a survival advantage over IV therapy alone in selected patients. The nursing care of women receiving IP chemotherapy involves unique assessment considerations, toxicity management, and patient teaching. Current IP chemotherapy administration guidelines are in various stages of development as the challenges of safe delivery to women with ovarian cancer undergo continued investigation.

ccording to the American Cancer Society (2008), an estimated 21,650 new cases of ovarian cancer will be diagnosed in 2008 and 15,520 women will die from the disease. Because of its subtle presenting symptoms, ovarian cancer often is diagnosed at an advanced stage. Abdominal bloating or discomfort; pelvic pain; dyspepsia; nausea; changes in bowel or bladder function including constipation, diarrhea, urge, urinary incontinence, and gas; shortness of breath; abnormal vaginal bleeding; unexplained weight loss or gain; and unusual fatigue (O'Rourke & Mahon, 2003) are among the often vague symptoms that may indicate ovarian neoplasia. At diagnosis, about 68% of women have advanced stage cancer that has already metastasized (National Cancer Institute, 2004).

Ovarian cancer received little public attention until 1989 when 42-year-old actress Gilda Radner died of the disease. Her death created public awareness and, because of her family history, stirred interest in the genetic susceptibility of ovarian cancer (Gilda's Club, 2007). A hereditary breast-ovarian cancer syndrome often caused by mutations in BRCA1 or BRCA2 genes includes a personal or family history of ovarian cancer diagnosed at any age and having two or more close relatives on the same side (maternal or paternal) with ovarian or breast cancer, particularly if they were diagnosed before age 50 (National Comprehensive Cancer Network, 2005). In families with inherited mutations, the lifetime risk of ovarian cancer can be as high as 40%-65%, whereas the lifetime risk among the general population is 1.8% (King, Marks, & Handell, 2003). Most ovarian cancers, however, are not associated with this syndrome. In about 10% of ovarian cancer cases, the woman is a carrier of genetic mutations in the BRCA1 and BRCA2 genes (Claus, Schildkrauten, Thompson, & Risch, 1996).

At a Glance

- Women with optimal surgical debulking or a small-volume residual tumor less than 1 cm are most likely to benefit from intraperitoneal (IP) chemotherapy.
- When administered into the peritoneal cavity, cisplatin or carboplatin and paclitaxel have been found to have higher concentrations and longer drug half-lives.
- Nursing assessment, patient teaching, and symptom management facilitate completion of IP chemotherapy and can increase overall survival in women with ovarian cancer.

Ovarian Cancer Treatment

After ovarian cancer is diagnosed, treatment usually begins with tissue confirmation and surgery. Optimal surgical debulking is an important intervention because the amount of tumor remaining after surgery has a direct relationship to increased length of survival; as a result, the goal is to leave minimal (residual tumor less than 1 cm) to no residual disease (Bristow,

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