

## FEATURE ARTICLE

# Intraperitoneal Chemotherapy: Implications Beyond Ovarian Cancer

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The National Cancer Institute (NCI) announced in January 2006 the use of intraperitoneal (IP) combined with IV chemotherapy postoperatively as the preferred treatment method for advanced ovarian cancer. The announcement stimulated the need for oncology nurses to become familiar with IP chemotherapy administration and patient management guidelines. IP administration allows a high concentration of chemotherapy to come into direct contact with tumors and surrounding tissues and organs. IP chemotherapy also is administered in clinical trials and some clinical settings for other histologies, such as low-grade gastrointestinal carcinoma and appendiceal carcinoma, which tend to spread locally before invading the bloodstream. Local-regional chemotherapy potentially is an ideal treatment for local spread of those peritoneal carcinomas. Overall side effects from regional treatment are less severe than with systemic treatment. Oncology nurses can help minimize and alleviate discomfort associated with IP chemotherapy administration. This article focuses on nursing management strategies for patients receiving IP chemotherapy for ovarian cancer and other peritoneal carcinomatosis.

The National Cancer Institute (NCI) announcement regarding the use of intraperitoneal (IP) chemotherapy for ovarian cancer in January 2006 has brought focus to its use in various cancers. Understanding IP chemotherapy has become essential for oncology nurses. IP chemotherapy has been a means of treatment for abdominal cancers since the 1950s, when it was used to treat malignant ascites and pleural effusions (Morrissey, Walton, & Van Le, 2000). Much research has addressed pharmacokinetics, the effectiveness of different chemotherapeutics, and its use in various cancers, such as ovarian, colorectal, endometrial, gastric, breast, mesothelioma, sarcoma, germ cell, and cancer of unknown origin (Brenner et al., 2006; Cheong et al., 2006; Feldman et al., 2003; Kianmanseh et al., 2007; Levine et al., 2007; Pingpank, 2005; Sugarbaker, 2005; Zanon et al., 2006; Zook-Enck, 1990). Clinical trials have focused on the best method of delivery, proper patient selection, and management of side effects. This article will focus on the use of IP chemotherapy in peritoneal carcinomatosis and ovarian cancer. Different techniques for accessing the peritoneal cavity will be discussed and nursing management of side effects will be stressed.

## Background

IP administration of chemotherapy is a method of cancer treatment that allows for a high concentration of chemotherapy to be in direct contact with tumors, surrounding tissues, and adjacent organs. By 1978, the use of IP chemotherapy had gradually changed as guidelines developed by NCI were instituted with the help of the advances in pharmacokinetics (Hoff, 1991).

### At A Glance

- ◆ Intraperitoneal (IP) chemotherapy is used for histologies other than ovarian cancer that seed the peritoneal surfaces such as low-grade gastrointestinal and appendiceal carcinoma.
- ◆ IP chemotherapy requires knowledge of treatment rationale, procedure for administration, and possible side effects.
- ◆ Oncology nurses can help minimize discomfort and maximize IP therapy by using key patient management strategies.

NCI (2006) has recommended IP chemotherapy for treatment of ovarian cancer (Almadrones, 2007). IP chemotherapy also is used in other peritoneal carcinomas and may be administered

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