cytopenia; stomatitis related to damage of GI mucosal cells
- Deficient Knowledge about cancer chemotherapy and managing adverse drug effects

Planning/Goals

The client will:

- Receive assistance in coping with the diagnosis of cancer
- Experience reduced anxiety and fear
- Receive chemotherapy accurately and safely
- Experience reduction of tumor size, change of laboratory values toward normal, or other therapeutic effects of chemotherapy
- Experience minimal bleeding, infection, nausea and vomiting, and other consequences of chemotherapy
- Maintain adequate food and fluid intake and body weight
- Receive assistance in activities of daily living when needed
- Be informed about community resources for cancer care (eg, hospice, Reach to Recovery, other support groups)

Interventions

Participate in and promote efforts to prevent cancer.

- **Follow and promote the diet recommended by the American Cancer Society** (ie, decrease fat; eat five or more servings of fruits and vegetables daily; increase intake of dietary fiber; minimize intake of salt-cured or smoked foods).
- **Promote weight control.** Obesity may contribute to the development of several cancers, including breast and endometrial cancer in women.
- **Identify cancer-causing agents** and strategies to reduce exposure to them when possible.
- **Strengthen host defenses** by promoting a healthful lifestyle (eg, good nutrition, adequate rest and exercise, stress management techniques, avoiding or minimizing alcohol and tobacco use).
- **Avoid smoking cigarettes and being around smokers.** Passive smoking increases risk of lung cancer in spouses of smokers and risks of brain cancer, lymphomas, and acute lymphogenous leukemia in children of smokers.
- **Minimize exposure to sunlight**, use sunscreens liberally, and wear protective clothing to prevent skin cancer.

Participate in and promote cancer screening tests in nonsymptomatic people, especially those at high risk, to detect cancer before signs and symptoms occur. These tests include regular examination of breasts, testicles, and skin and tests for colon cancer such as hemoccult tests on stool and sigmoidoscopy. Early recognition of risk factors, premalignant tissue changes (dysplasia), biochemical tumor markers, and beginning malignancies may be lifesaving; early treatment can greatly reduce the suffering and problems associated with advanced cancer.

For clients receiving cytotoxic anticancer drugs, try to prevent or minimize the incidence and severity of adverse reactions (Box 64-2).

Provide supportive care to clients and families.

- Physiologic care includes pain management, comfort measures, and assistance with nutrition, hygiene, ambulation, and other activities of daily living as needed.
- Psychological care includes allowing family members or significant others to be with the client and participate in care when desired, and keeping clients and families informed.

Evaluation

- Monitor drug administration for accuracy.
- Observe and interview for therapeutic effects of chemotherapy.
- Compare current laboratory reports with baseline values for changes toward normal values.
- Compare weight and nutritional status with baseline values for maintenance or improvement.
- Observe and interview for adverse drug effects and interventions to prevent or manage them.
- Observe and interview for adequate pain management and other symptom control.

PRINCIPLES OF THERAPY

Overview of Cancer Treatment

Most cancer treatment involves surgery, radiation, and chemotherapy. Optimal regimens maximize effectiveness (eg, attempt to eradicate tumor cells at primary, regional, and systemic sites) and minimize morbidity (eg, pain and treatment-related toxicity).

Surgery is used to excise small, localized tumors, which may be curative; to remove tumors that have been reduced in size by radiation therapy, chemotherapy, or both; and to treat complications of cancer, such as bowel obstruction. Surgical risks are greater in clients who have received preoperative radiation therapy or chemotherapy.

Radiation therapy is used to treat most types of cancer. It may be used alone to cure some malignancies such as Hodgkin's disease or cervical cancer. It may be used with surgery to reduce the need for radical surgery (eg, in breast cancer, excision of small tumors plus radiation therapy is as effective as mastectomy). With soft tissue sarcomas of the limbs, wide excision plus radiation therapy can be used instead of amputation. Radiation is also used to eliminate local or regional malignant cells (eg, positive lymph nodes) that remain after surgery; with chemotherapy to cure or control growth of tumors; and as a palliative treatment in metastatic disease, such as relieving symptoms in clients with bone or brain involvement.

Cytotoxic chemotherapy is most effective when started before extensive tumor growth or when the tumor burden has been reduced by surgical excision or radiation therapy. Once metastasized, solid tumors become systemic diseases and are not accessible to surgical excision or radiation therapy.

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