

The Nurse and Chemotherapy

Summary of Key Points in the Administration of Antineoplastic Agents

1. Adequately assess the patient's port or line.
2. Discuss with the patient any past problems experienced since last treatment.
3. Use sterile technique; be aware that the patient might have a compromised WBC count.
4. Meticulously prepare the site.
5. Assess patency of port or line with 10 to 20 ml of normal saline before infusing the cytotoxic agent.
6. Mix chemotherapy drugs according to manufacturer's recommendations.
7. Infuse medication as per facility protocol.
8. Be constantly aware of a slow leak or insidious infiltration.
9. Use a final flush of 10 to 20 ml normal saline after the chemotherapeutic agent is infused to clear the drug from the port or line.
10. Follow OSHA Standards for disposal of cytotoxic agents/equipment.

Nursing Plan of Care- Chemotherapy Patient

Focus Assessment:

Subjective

- Interview patient regarding previous experience with chemotherapy.
- Determine level of knowledge regarding chemotherapy and cancer.

Objective

- Assess for nausea and vomiting
 - Inspect oral cavity daily
 - Assess breath sounds
 - Monitor vital signs
 - Note type of cancer, length of illness, prognosis, previous chemotherapy
 - Assess nutritional status
 - Review laboratory data
 - Assess urinary output and hydration
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Nursing Diagnoses:

- Altered nutrition less than body requirements, related to consequences of treatment.
- Risk for noncompliance with dietary restrictions of chemotherapy, related to no alcohol while on methotrexate, no foods high in tyramines while on procarbazine.
- Risk for fluid volume deficit related to excessive losses through vomiting, diarrhea, wounds, or impaired oral intake.
- Oral mucous membranes altered, related to side effects of chemotherapeutic agents (antimetabolites)
- Risk for skin and tissue integrity impaired, related to effects of chemotherapy, immunologic deficit, altered nutritional state or anemia, or presence of lesions, drug extravasation.
- Risk for gas exchange impaired, related to alveolar membrane thickening (pulmonary fibrosis), altered blood flow or decreased circulation or altered oxygen carrying capacity.
- Fear and anxiety related to situational crisis, threat to or change in health and socioeconomic status, role functioning, interaction patterns, threat of death, separation from family.
- Knowledge deficit related to lack of exposure or recall, information misinterpretation, myths, unfamiliarity with resources.

Outcome Criteria:

The patient will:

- Demonstrate stable weight or progressive weight toward goal and be free of signs of malnutrition
 - Demonstrate normalization of laboratory values
 - Demonstrate that antiemetic medications are effective
 - Comply with dietary restrictions
 - Display moist mucous membranes
 - Demonstrate techniques to maintain and restore integrity of oral mucous
 - Identify interventions for specific condition; prevent complications and promote healing as appropriate
 - Demonstrate adequate oxygenation of tissues by arterial blood gas values within patient's normal range
 - Be free of respiratory distress
 - Display appropriate range of feelings
 - Verbalize accurate information about diagnosis and treatment regimen
 - Initiate necessary lifestyle changes and participate in treatment regimen
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Nursing Management: Critical Activities

- Monitor for side effects and toxic effects of chemotherapeutic agent
- Institute neutropenic and bleeding precautions when necessary
- Offer bland, easily digested diet
- Administer antiemetic medication
- Administer chemotherapeutic drugs in the late evening so the patient may sleep at the time emetic effects are greatest
- Monitor for adequate fluid intake, dehydration, and electrolyte imbalance
- Monitor for effectiveness of measures to control nausea and vomiting, assist the patient in obtaining a wig or other head covering device as appropriate
- Offer six small feedings daily
- Ascertain that IV is infusing well; dilute antineoplastic agents
- Administer appropriate antidotes per protocol and physician's orders if extravasation occurs
- Avoid use of commercial mouthwash products that contain alcohol or phenol and may increase mucous membrane discomfort; use mouthwash made from warm saline and dilute solution of hydrogen peroxide or baking soda and water
- Administer analgesics and topical xylocaine jelly, or antimicrobial mouthwash, or both (e.g. nystatin) as needed for stomatitis
- Monitor nutritional status and weight
- Minimize stimuli from noises, light, and odors, especially food
- Follow recommended guidelines from safe handling or parenteral antineoplastic drugs during drug preparation