

CHEMOTHERAPY AND BIOTHERAPY GUIDELINES

Section: Nursing

Compliance: ACHC Infusion Pharmacy

ACHC Standards:

Policy ID: NUR202

Effective: 1/1/21

Reviewed: 5/1/21

Revised:

Approved by, Title and Date Approved: Kathleen Patrick, President 1/1/21, 5/1/21

I. POLICY

Administration of chemotherapeutic and bio therapeutic agents shall be initiated upon a physician's order or by a licensed agent of the physician. The physician's or authorized prescriber's order shall comply with all state and federal regulations and the State Nurse Practice Act governing prescriptive practices. Chemotherapy or biotherapy shall be administered by registered nurses who have demonstrated competency in its administration.

II. PROCEDURES

- A. All patients referred for chemotherapy shall meet the clinical admission criteria. Informed consent of the patient or authorized caregiver must occur before chemotherapy administration can be initiated.
- B. Only registered nurses who have documented skills and competency in administration of antineoplastic agents may administer chemotherapy or biotherapy. The nurse shall demonstrate competency in oncology disease process, drug classifications, their indications, actions, mode of administration, appropriate dosage and diluents, adverse drug effects, toxicities, incompatibilities, potential complications, rate of delivery, drug storage and stability, patient monitoring, management of extravasations and chemotherapy spills in the home.
- C. Drugs with a known potential for allergic response should be administered under constant supervision by knowledgeable and skilled clinicians who can ensure optimal patient management in the event of an allergic/anaphylactic reaction. Clinicians should be aware that hypersensitivity may increase with multiple dosing of an agent.
- D. When administering a drug with known potential for allergic response, a "test dose" will be performed with initial dosing and with subsequent dosing where indicated. This test dose is best administered in a medically controlled environment. Although most anticipated untoward responses to cytotoxic agents (such as hematologic alterations, mucous membrane changes) do not occur until after drug administration, specific drugs have a potential for an anaphylactic response.
 1. Agents with High Risk of Immediate allergic reactions: (Test doses for this group MUST be administered in a medically controlled environment).

- * Asparaginase
- * Docetaxel (Taxotere)
- * Murine monoclonal antibodies, i.e., Rituximab
- * Paclitaxel

***These agents are not routinely recommended for infusion in the home setting due to high risk of allergic/adverse reactions.**

2. Agents with a Low to Moderate Risk of Immediate allergic reactions:

- * Anthracyclines (i.e., Adriamycin)
- * Bleomycin
- * Carboplatin
- * Chimeric and human monoclonal antibodies
- * Cisplatin
- * Etoposide
- * Melphalan
- * Methotrexate
- * Procarbazine
- * Teniposide

3. Agents with a Rare Risk of Immediate allergic reactions:

- * Cytarabine
- * Cyclophosphamide
- * Chlorambucil
- * Dacarbazine
- * 5-Fluorouracil
- * Isosfamide
- * Interferons
- * Interleukins
- * Mitoxantrone

E. Physician orders for cytotoxic agents will include:

1. Dose, dilution, route of administration, absolute dosage, frequency, number of doses to be given, and length of infusion (i.e., bolus or continuous), or dwell time (intraperitoneal)
2. Orders for antiemetic shall be obtained if agent is known to cause nausea are administered
3. Orders for premedication's (i.e., antiemetics, hydration)
4. Orders for treatment of extravasation, if appropriate
5. Orders for treatment of anaphylaxis, if appropriate
6. Orders for flushing of venous access device
7. Pre and Post laboratory blood work

F. If the cytotoxic agent is investigational, a copy of the patient's informed consent must be obtained and kept in the patient's clinical record, and a copy of the protocol will be forwarded to the Director of Pharmacy for clinical review.

G. While a patient is on service the physician will be contacted prior to the next dose of the cytotoxic agent if:

1. Clinical findings are abnormal and different from baseline. Oral temperature greater than 100.4 should be reported to physician before chemotherapy is initiated. A pain assessment will be performed upon each visit to the patient.
2. Reportable laboratory results:
 - a. Adults & Children > 2 yrs. old:
 1. WBC less than 4,000/ cu mm
 2. Platelets less than 100,000/cu mm
 3. ANC less than 1,000 cu mm
 4. Creatinine greater than 1.5 mg/dl
 5. BUN greater than 20 mg/dl
 - b. Children < 2 yrs. old:
 1. WBC less than 6,000/ cu mm
 2. Platelets (by 6 months) less than 100,000/ cu mm
 3. ANC less than 1,500/ cu mm
 4. Creatinine greater than 1.0 mg/dl
 5. BUN greater than 20 mg/dl
3. Proper placement of the access device cannot be obtained or confirmed.

H. Compounding:

1. Cytotoxic agents will be prepared in a pharmacist-supervised compounding facility whenever possible.
2. Cytotoxic agents may ONLY be admixed in the home using pharmacy prepared containers when drug stability is an issue.

I. Venous Access:

1. All venous access devices will be evaluated for patency by positive aspiration of a blood return. If a positive blood return is not obtained following repositioning of the patient, the therapy should be held, and the physician notified for further instructions.
2. Central venous access shall be the preferred route of administration for cytotoxic agents.
3. Peripheral venous access is generally used only for the administration of non-vesicant or non-irritant cytotoxic agents.
4. Peripheral venous access, 1- ½ inch in length or less, SHALL NOT be used for the administration of continuous infusions unless monitored by a Registered Nurse.
5. Midline catheters may be used for non-irritant/non-vesicant continuous infusions.

6. Bolus vesicant cytotoxic agents will be administered via peripheral vein only under exceptional circumstances, approved by the Nurse Manager by confident, competent nurses and with orders for treatment of extravasation written prior to administration.
7. DO NOT use existing peripheral lines and DO NOT place over sites of flexion (i.e., antecubital fossa, wrist). If bolus vesicants are administered via peripheral line, the site will be monitored throughout the infusion by the nurse. If a vesicant extravasates, the nurse must stop the drug, implement physician orders for treatment of extravasation and contact the physician.

J. Handling/Disposal of Contaminated Supplies:

1. Prior to assignment to a patient receiving cytotoxic agents, each nurse will demonstrate competency in the handling and disposal of cytotoxic agents.
2. Each patient receiving chemotherapy shall be supplied with (in addition to usual infusion supplies):
 - a. Cytotoxic spill kit
 - b. Sharps container
 - c. A cytotoxic administration kit containing:
 1. Masks
 2. Disposable gowns (closed front, long cuffed sleeves)
 3. Latex disposable gloves
 4. Plastic backed absorbent barriers
 5. Zip lock bag
 6. Alcohol towelettes
 7. Large, disposable, white cytotoxic bags
3. The patient/caregiver(s) shall be taught about their chemotherapy, uses, adverse effects and their management, method of administration, and the hazards of handling cytotoxic agents, how to appropriately dispose of supplies and cytotoxic waste and how to clean a spill. Patient education will also include safe, appropriate storage of chemotherapy and supplies, care of personal clothing and laundry while on chemotherapy. All patient education will be appropriately documented.
4. Personnel will be provided with information regarding the potential mutagenic properties of cytotoxic agents. However, the potential risk from the limited contact with prefilled containers of cytotoxic agents in the home is minimal when standard procedures for safe handling and disposal are followed.
5. Although reassignment of a nurse clinician who is pregnant, attempting to conceive or breast feeding is not considered necessary, reassignment from direct patient care is at the discretion of the Nurse Manager.