Cytotoxic and Biotherapy Medication Management

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Policy/Purpose

To ensure safe staff handling, administration and disposal of cytotoxic and biotherapy drugs and related waste to prevent or minimise occupational exposure to cytotoxic and biotherapy drugs.

To ensure the safety of all patients within a cytotoxic or biotherapy environment

Criteria

Cytotoxic medications may be used for two purposes:

- Treating cancer
- As immunosuppressant agents used to treat non-malignant conditions e.g. rheumatoid arthritis, immunological conditions

Associated documents

- Legal and Quality Policies and Procedures
- Health, Safety and Wellbeing Policies and Procedures
- Infection Prevention and Control Policies and Procedures
- Cytotoxic and Biotherapies Safe Handling SLP
- Cytotoxic and Biotherapy Credentialing Programme
- Area specific individualised prescriptions
- Peripheral IV Therapy Policy (Fluid and Medication Policies and Procedures)
- CVAD policy (Fluid and Medication Policies and Procedures)

Scopes and Credentialing

Oral/Intramuscular/Subcutaneous Cytotoxic

- Senior Medical Officer (SMO)
- Speciality Registrar
- RN’s who have successfully completed the Cytotoxic and Biotherapies Safe Handling SLP.
- EN’s who have successfully completed the Cytotoxic and Biotherapies Safe Handling self-learning package may double independent check and administer oral cytotoxic agents only.
• Restricted scope EN’s who have successfully completed the Cytotoxic and Biotherapies Safe Handling self-learning package may only double check oral cytotoxic agents (not administer)

IV Cytotoxic Administration

• Senior Medical Officer (SMO)
• Speciality Registrar
• Registered Nurses who have successfully completed the IV Cytotoxic and Biotherapy Training programme
• Verification will be placed on the CDHB Competency Database
• Recertification is required every 3 years

Intrathecal and Intraventricular Cytotoxic Administration

This scope is limited to CDHB staff on the Intrathecal/Intraventricular Register. Training for this scope is outlined in the CDHB Preparation, distribution and administration of Intrathecal and intraventricular chemotherapy policy

Refer to Pharmacy Intranet site for the register and policy

Verification will be placed on the Intrathecal/Intraventricular Register or the Pharmacy Services website

Intravenous Biotherapy Administration

Level one IV certification is required.

Refer to Roles and responsibilities policy (Fluid and Medication Policies and Procedures)

Scope for other cytotoxic routes

Staff must follow local area policy and consider their scope of practice and educational requirements prior to approval to administer in the following areas.

Bladder – Limited to Urology service
Intraocular – Limited to Theatre and the Ophthalmology service
Trans arterial chemo embolisation – Limited to Interventional Radiology
Topical – Limited to Theatre
Intra pleural – Limited to Respiratory
Environmental and Safety Requirements

- IV cytotoxic or biotherapy administration must be undertaken in designated clinical areas that are equipped to deal with any emergencies that might arise from the treatment i.e. spills, extravasations, infusion related reactions
- The clinical staff in the designated areas must have knowledge of the potential side effects and hazards when handling cytotoxic and/or biotherapy drugs and associated waste
- All patients receiving cytotoxic drugs should be identified as receiving these drugs by displaying a cytotoxic bedside card (available from medical illustrations) or on the patient information board
- Personal Protective Equipment (PPE) appropriate for cytotoxic/biotherapy administration must be worn. This is considered to be a long sleeved cuffed fluid impermeable gown and long cuffed gloves. Mask and goggles are optional.
- Spills/contamination/waste management must be managed as stated in 1.7 and 1.8

Nurses who are Pregnant or Breastfeeding

- Registered Nurses who have cytotoxic and biotherapy competency and are pregnant, breastfeeding or planning pregnancy have the right to decline handling cytotoxic or biotherapy drugs
- Are still able to act as a double independent checker

Casual Nursing Staff

To ensure casual staff safety when deployed to areas where cytotoxic/biotherapy drugs are present, the CNM/NIC must make the nurse aware of the safe handling and disposal of waste precautions

Informed Consent for Chemotherapy

SMO/Registrar Responsibilities

The SMO is ultimately responsible for ensuring sufficient information is provided to the patient prior to obtaining written informed consent

Nurses Responsibilities

The Nurse must ensure the informed consent process has been undertaken and the patient family/whānau/significant others possess appropriate knowledge prior to administration of cytotoxic or biotherapy drugs
Patient and Family/Whānau Education
The Nurse must ensure that the patient and their family/whanau know what action is to be taken if problems are encountered both in hospital and on discharge and have contact details.

IV Administration Safety Considerations

Administration of vesicant drugs
- Vesicant drugs may only be infused through a CVAD or administered as a bolus through a peripheral cannula.
- Exception: Vinca alkaloids are infused in a minibag and may be administered into a peripheral cannula as per international standards. However a cytotoxic competent nurse must remain with the patient throughout the infusion when being administered peripherally.

Administration of Irritant Drugs
- Irritant drugs may be administered by gravity infusion or using a volumetric pump (pressure setting must be at maximum of L3).

For further information refer to cytotoxic and biotherapy website.

Procedural Considerations
For further information refer to the Cytotoxic and Biotherapy Website

Closed IV administration systems
IV chemotherapy may be administered using a closed IV system

Complications

Flare Reactions
Refer to Complications of IV therapy (Fluid and Medication Policies and Procedures)

Extravasation Requirements
- Extravasation kits must be available in clinical areas administering cytotoxic and biotherapy drugs
- Refer to complications of IV therapy Vol 12 for general requirements

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- Refer to Cytotoxic and Biotherapy Website for procedural management of extravasation.

Waste Management
- Refer to HealthLearn for elearning module on safe handling
- Refer to Cytotoxic and Biotherapy Website for procedural information
- All cytotoxic waste needs to be handled and disposed of in accordance with OSH guidelines and Volume 2 Legal and Quality CDHB manual
- All staff required to handle cytotoxic waste have received education on safe handling.
- Most cytotoxic drugs are primarily eliminated by renal and faecal excretion although other routes of excretion may include sweat, saliva, vomit and other body fluids.
- Cytotoxic drugs or the metabolites may remain in body fluids for up to 7 days after treatment. Generally the majority have been excreted within 48-72 hours of administration. Biotherapies and their metabolites are excreted within 48hrs.
- Standard precautions should continue when handling body fluids at all times. Equipment containing or contaminated by cytotoxic/biotherapy waste: pans, jugs, urinals, potties, catheter bags must be emptied immediately. This reduces the risk of exposure to potential contaminants.

Disposal of Patient Waste
- When handling cytotoxic excreta wear non-sterile gloves and a plastic apron
- Patient waste should be flushed with a full flush after use with the toilet lid down where possible.
- Nappies should be weighed in a sealed impermeable bag.
- Pans, urinals, jugs, potties contaminated by cytotoxic waste should be sanitised as soon as possible. If waiting for sanitation, this equipment should be covered with a plastic-backed absorbent cover, labelled with cytotoxic stickers and set aside from other equipment

Disposal of Equipment
- Immediately after use, place all cytotoxic/biotherapy contaminated sharps, into a cytotoxic sharps container.
• IV administration sets should not be disconnected from infusion bags. On completion of infusion, discard complete unit into a cytotoxic waste bag.

• Place all materials used in the preparation and administration of cytotoxic/biotherapy drugs such as gloves, gowns and syringes in a cytotoxic waste bag.

Management of Contaminated Hospital Linen/Clothing

• Linen/clothing contaminated with cytotoxic/biotherapy drugs, blood, vomit or excreta from a patient who has received drugs within 48 hours should be treated as hazardous, requiring specific handling measures.

• Personnel handling this linen/clothing should as a minimum PPE for standard precautions when handling this material

• All contaminated hospital linen/clothing should be bagged in an alginate liner inside a red laundry bag and sent immediately to the laundry.

Management of Contaminated Personal Laundry

• Personal clothing that is contaminated must be double bagged in plain plastic bags and washed as soon as possible. It should be washed separately from other non-contaminated items in a hot wash.

• Education of persons handling personal laundry should be undertaken to minimise risk of exposure i.e. non touch technique when tipping clothing into the washing machine or using gloves if available.

Please Note: If contamination of items is very extensive disposal of items may need to be considered

Management of Deceased Patients

• Patients who have received cytotoxic agents within 7 days of death should be handled post mortem using cytotoxic precautions.

• A purple cytotoxic label should be placed on the mortuary envelope and orderly and mortuary staff made aware of safe handling requirements.

• The mortuary will notify undertakers of precautions required and supply cytotoxic waste resources as required.
Cytotoxic/Biotherapy Spills

- A spill situation includes any cytotoxic/biotherapy drug or body fluid which may inadvertently leak or spill in any way.
- All staff required to handle a spill situation must have received information/education on how to manage a spill.
- A spill involving a cytotoxic/biotherapy drug may present a higher risk than a body fluid spill. However, unchanged drug or active metabolites may be present in body fluids in high concentrations within the first 48-72 hours of cytotoxic/biotherapy drugs being administered and therefore should be treated in the same manner as a drug spill. The full spill procedure should be followed in these situations.
- Refer to the Cytotoxic and Biotherapy Website for procedural information on managing a spill situation.
- Greater than 48 hours after administration may present a lower risk. Staff should remain vigilant and wear PPE appropriate to the situation.

Measurement/Evaluation

Audits are undertaken monthly by nursing staff against this policy and supporting procedure documents for chemotherapy administration.

Incident management process

References


http://www utdol com/online/content/search do?search=chemotherapy&source=USER_INPUT&searchOffset=& NEXTITEM=& EVENTNAME=Go& EVENTARG=undefined& POSTBACK=true& DESTINATION=& xCoordHolder=0& yCoordHolder=0

Acknowledgement