Procedure III-50
Administration of High Alert Medications by the Intrathecal Route via Lumbar Puncture or Ommaya Reservoir

PROCEDURE

1. Introduction
   1.1 Focus
   This procedure describes the steps required when preparing for administering high alert medications and administering by the intrathecal route via lumbar puncture or ommaya reservoir.

   1.2 Health Organization Site Applicability
   All BC Cancer Sites and sites that require compliance with BC Cancer Policies and Standards are expected to follow this procedure.

   1.3 Practice Level
   High Alert Medications delivered by the intrathecal route will be administered by physicians only.

   1.4 Definitions
   **High-alert medications**: drugs that bear a heightened risk of causing significant patient harm when used in error. Although mistakes may or may not be more common with these drugs, the consequences of an error are clearly more devastating to patients

   **Lumbar Puncture (LP)**: also called a spinal tap, is a procedure to collect and look at the cerebrospinal fluid (CSF) surrounding the brain and spinal cord.

   **Ommaya Reservoir**: an intraventricular catheter system that can be used for the aspiration of cerebrospinal fluid or for the delivery of drugs (e.g. chemotherapy) into the cerebrospinal fluid.

   1.5 Patient/Client Information
   In order to reduce distractions during the procedure, discussions with the patient, family and staff regarding consent, indications, and the procedure involved will take place prior to the procedure. The number of people in the treatment area will be kept to a minimum in order to reduce distractions during the procedure.
1.6 Equipment and Supplies
For appropriate equipment and supplies: Link to ST Policy V-10 – see PPE table on PP 11-12 of http://www.bccancer.bc.ca/chemotherapy-protocols-site/Documents/Policies%20and%20Procedures/V_10_SafeHandlingStandards_August2014.pdf

2. Procedure
2.1 Steps and Rationale

2.1.1 The patient’s platelet count will be sufficient to permit administration of the medication(s) according to the specific treatment protocol and will have been drawn within one week of the procedure. For patients in whom ongoing thrombocytopenia is anticipated, the platelet counts are to be drawn immediately prior to or the morning of the procedure.

2.1.2 Gloves; long sleeve, impermeable chemotherapy gowns; surgical mask; and safety goggles are provided for use during administration of the hazardous drugs. The gloves, gowns and masks are used as needed by all clinicians during all the procedures. Safety goggles must be worn by both the physician and nurse any time there is a risk of spray during the procedure.

2.1.3 The BC Cancer Pharmacy will prepare, check, and dispense all intrathecal doses according to the established pharmacy procedures. These doses will be dispensed from the Pharmacy as follows:

2.1.3.1 All intrathecal doses will have a label stating the patient name, date, generic drug name, dose and route in full (i.e. By INTRATHECAL injection). The route will be highlighted by using all upper case letters. This labelling will be attached to the syringe and to the outer zip-lock bag.

2.1.3.2 Intrathecal hazardous drug doses will be provided in Luer-lock syringes.

2.1.3.3 Intrathecal syringes and labels will have an auxiliary label stating IT attached to the syringe and the outer zip-lock bag. These will be bright in colour and clearly visible. See sample below:

2.1.3.4 Intrathecal doses will be packaged in separate outer containers for transport to the centre-specific treatment location. Intrathecal doses will be delivered separately from all other chemotherapy doses.

2.1.3.5 For protocols in which intrathecal drugs and drugs administered by other parenteral routes are all to be given in one treatment cycle, the non-intrathecal drugs will not be released from Pharmacy until the nurse or

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physician confirms that the intrathecal drug administration is complete.

2.1.4 For all lumbar punctures, the only drugs permitted in the treatment area are the intrathecal drugs and the drugs used for analgesia and sedation. All staff involved in the procedure are responsible for ensuring that no other drugs are taken into the treatment area. However, medications that patients are receiving by infusion at the time of the administration of the intrathecal drugs do not need to be stopped or removed during the procedure unless the physician specifically requests it.

2.1.5 Once the patient is in the treatment area the two clinicians will:

2.1.5.1 Identify the patient as per BC Cancer policy LEI 100 Patient Identifiers

2.1.5.2 Never administer medications via the intrathecal route that are labelled with the following warning label. See BC Cancer Provincial Systemic Program Policy V-40: Labelling of Vinca Alkaloid Preparations:

2.1.5.3 Complete an “Independent Double Check" (IDC): a process by which two clinicians work separately to verify the accuracy of the order and medication related care to be delivered. This includes verification of the right patient, right drug, right dose, and right route. The physician administering the intrathecal medication must be one of the two clinicians completing the IDC at the point of care. The two clinicians perform the verification process independently of one another, without assistance from each other and without the knowledge of the steps followed or conclusions arrived at by each other. Once verifications are complete, results are compared and discrepancies, if any, must be resolved before any action is taken (e.g. transcription, preparation or administration). Refer to "BC Cancer High Alert Medications policy"

2.1.5.4 Both clinicians completing the checks will sign the medication orders to indicate that the intrathecal chemotherapy has been administered and checked. The first clinician signs to indicate that they have administered the medication, and the second clinician signs to indicate this has been checked.

2.1.5.5 Place the intrathecal chemotherapy on the sterile drape beside the LP tray. (The syringes are not considered sterile.) The only additional drugs permitted on the tray are local anesthetics.

2.1.6 Immediately prior to injection of the chemotherapy drug the physician will read the label on the syringe out loud to the nurse. The chemotherapy drug will be administered slowly through the LP needle over 1-2 minutes.

2.1.7 For patients who will receive the chemotherapy drugs for intrathecal use under fluoroscopy and other settings where a nurse is not in attendance with the patient, the two professional checks are still required during the procedure. These will be done by the
radiologist present and the clinician (who must be experienced in administering chemotherapy by the intrathecal route) who accompanies the patient to the fluoroscopy suite and administers the medications.

2.1.8 For administration, including the Independent Double Check as described in section 2.1.5.3, the two clinicians will sign the Medication Administration Record (MAR).

2.2 Site Specific Practices

2.2.1 Intrathecal administration of chemotherapeutic agents will be performed in pre-specified areas at each of the facilities. See regional Site Directives for details.

2.3 Documentation

2.3.1 Intrathecal chemotherapy orders will be written on a separate order sheet from all other chemotherapy and supportive medication orders.

3. Related Documents and References

3.1 Related Documents

- BC Cancer policy LEI 100 Patient Identifiers at H:\EVERYONE\BCCA Policy Manual\VI. Legal & Ethical\LEI 100 Patient Identifiers.doc.
- BC Cancer High Alert Medication Policy
- Administration of High Alert Drugs by the Intrathecal Route via Lumber Puncture or Ommaya POLICY
- Provincial Systemic Therapy Policy III-10 Systemic Therapy Delivery Process
- BC Cancer Nursing Practice Reference C-252: Administration of Chemotherapeutic Agents
- Provincial Systemic Therapy Policy V-10 Safe Handling of Hazardous Drugs
- BC Cancer Pharmacy Practice Standards for Hazardous Drugs manual

3.2 References

- WorkSafe BC OHS Regulation, Part 6: Substance Specific Requirements: Cytotoxic Drugs
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