NOTE: The first appearance of terms in bold in the body of this document (except titles) are defined terms – please refer to the Definitions section.

Purpose
To ensure safe and consistent practice in direct IV medication administration by health care professionals.

Applicability
This policy and procedure applies nursing health care professionals at all Covenant Health facilities.

Responsibility
Only health care professionals who have completed the required educational program and exam, and have demonstrated competency, are able to provide medication through the direct IV method.

It is the duty and responsibility of all health care professionals to self-identify learning needs and undertake appropriate measures to ensure ongoing and continual competency.

Principles
Direct IV medication administration:

• provides an immediate drug effect;
• helps achieve therapeutic drug levels more quickly than other routes;
• delivers medications that can't be diluted or require minimal dilution;
• delivers medications that are irritating or cause discomfort if administered subcutaneously or intramuscularly; and
• minimizes fluid loading in those patients for which it would be contraindicated.

Procedure

1.0 EQUIPMENT

✓ syringe with medication (appropriate for volume of medication and/or type of venous access device)
✓ approved antiseptic swabs
✓ gloves
✓ two syringes containing 10 mL of appropriate flush solution for flushing
2. **Administering via Infusion Set**

2.1 Check patient care order.

2.2 Check AHS Regional Parenteral Manual drug monograph and other acceptable resources (e.g. lexicomp, Micromedex) for acceptable route, compatibility of solution, dose, rate of administration, monitoring, and adverse outcomes.

2.3 Perform hand hygiene.

2.4 Assemble equipment. Prepare medication and flush syringes. **NOTE:** The medication syringe must be labelled with drug name dose, date and time.

2.4.1 never use a prefilled syringe to withdraw and/or dilute medication

<table>
<thead>
<tr>
<th>ALERT: Do not give more than one medication in same syringe.</th>
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<td>For example, opioid and antiemetic direct IV medications must be given in separate syringes.</td>
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2.5 Identify patient/resident/client¹ (per Covenant Health Policy/Procedure #VII-B-25, *Identification of Patient, Resident or Client Using Two Identifiers*), and check for allergies.

2.6 Explain procedure to patient, if possible

2.7 Don clean gloves

2.8 Select lowest injection port on administration set. (i.e. proximal to the patient).

2.9 Prior to each access, scrub the hub of injection port with approved antiseptic swab for at least 15 seconds and allow to dry.

2.10 Stop infusion by pausing pump and pinch off IV tubing just above injection the port, distal from the patient.

2.11 Attach prefilled NS syringe to check for IV patency and IV site complications.

2.11.1 Assess patency of VAD by aspirating for blood return, lack of resistance to flushing, and absence of pain with flushing.

2.11.2 Observe for signs of infiltration by observing for an increase in edema at site of infusion.

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¹ Hereafter, all references to 'patients' includes residents and clients.
2.12 Attach medication syringe to injection port

2.13 Administer medication at prescribed rate and observe patient carefully for adverse reactions. DO NOT administer medication if resistance is met while injecting.

Note: If occlusion is indicated, remove peripheral IV or see policy VII-B-335, *Occlusion Management of Central Vascular Access Devices in Adult Patients*.

2.14 After medication has been administered, attach flush syringe (continue to hold line clamped) and flush at the same rate as the medication was administered until entire medication dose has been cleared from the infusion system and VAD lumen.

2.15 Discard syringes.

2.16 Remove gloves and discard

2.17 Perform hand hygiene

2.18 Restart infusion

2.19 Observe and advise patient to report any adverse reaction

3. **Administering via VAD port (VAD not in use)**

3.1 Check patient care order.

3.2 Check AHS Regional Parenteral Manual drug monograph for acceptable route, compatibility of solution, dose, rate of administration, monitoring, and adverse outcomes.

3.3 Perform hand hygiene.

3.4 Assemble equipment. Prepare medication and flush syringes for NS for flushing. NOTE: The medication syringe must be labelled with drug name and dose, date and time.

3.4.1 Never use a prefilled syringe to withdraw and/or dilute medication

3.5 Identify patient (per Covenant Health Policy/Procedure #VII-B-25, *Identification of Patient, Resident or Client Using Two Identifiers*), and check for allergies.

3.6 Explain procedure to patient, if possible.

3.7 Don clean gloves
3.8 Prior to each access, scrub the hub of needleless connector with approved antiseptic swab for 15 seconds and allow to dry.

3.9 Attach flush syringe onto needleless connector.

3.10 Check for IV patency and IV site complications.

3.10.1 Observe for signs of infiltration by observing for an increase in edema at site of infusion.

3.10.2 Assess patency of VAD by aspirating for blood return, lack of resistance to flushing, and absence of pain with flushing.

Note: If occlusion is indicated, remove peripheral IV or see policy VII-B-335, *Occlusion Management of Central Vascular Access Devices in Adult Patients*.

3.11 Slowly flush with flush solution (usually 5 mL). Remove syringe.

3.12 If patency intact, attach syringe containing medication onto needleless connector.

3.13 Administer medication at prescribed rate and observe patient carefully for adverse reactions (e.g. speed shock, local histamine reaction).

3.14 After medication has been administered, attach prefilled 10 mL NS flush syringe (continue to hold line clamped) and flush at the same rate as the medication was administered until entire medication dose has been cleared from the infusion system and VAD lumen.

3.15 Lock VAD as per Quick Reference Sheet - Vascular Access Device

3.16 Discard syringes.

3.17 Perform hand hygiene.

3.18 Observe and advise patient to report any adverse reaction

4.0 **Patient Teaching**

4.1 Provide patient teaching as appropriate. Ensure patient’s understanding of procedure and symptoms of adverse reaction to report.
5.0 Documentation

5.1 Document per Covenant Health Policy #III-120, Clinical Documentation

5.2 Document any complications, adverse reactions and/or patient's response on Patient Care Record. Report per Covenant Health policy #III-45, Responding to Adverse Events, Close Calls and Hazards.

Definitions

Health care professional means an individual who is a member of a regulated health discipline, as defined by the Health Disciplines Act (Alberta) or the Health Professions Act (Alberta), and who practices within scope and role.

Related Documents

Direct IV Medication Administration, Specialized Clinical Competency (SCC) Program learning module and exam – available on CLiC

Covenant Health Policies/Procedures, available @ http://www.compassionnet.ca/Page2099.aspx
- Medication Administration, #VII-A-50
- Clinical Documentation, #III-120

References


Previous Version Date(s)

N/A