Peripheral intravenous therapy

Contents

Policy

Staff and approved persons with 1st Level endorsement in peripheral IV management will adhere to the below requirements

Purpose

To guide staff on the scope of peripheral IV therapy and safe, appropriate management.

Scope

All 1st level certificated persons, Medical Practitioners and Approved persons and all staff involved in the double independent checking role with peripheral IV medication/fluid and cannulation endorsed staff.

Associated Documents

- Roles and Responsibility Policy
- Checking Procedure: Fluid and medication
- Peripheral Cannulation Policy
- Medication and IV Fluid Management Programme
- Infection Prevention and Control policies
- Patient Identification policy
- Health Care Waste
- IV link site

British National Formulary (BNF).

Notes on Injectable Drugs (NZ Hospital Pharmacists Association Inc.)

Royal Children's Hospital Melbourne, Paediatric pharmacopaedia http://www.rch.org.au/pharmacopoeia New Ethical's Catalogue (MIMS)

Requirements for Level 1 Endorsement Attainment

Successful completion of:

- The CDHB Level 1 Medication and IV Fluid Management Programme, both theory and practical components, on orientation to the CDHB
- Endorsement is required to be completed within four months of commencing employment
- Specialist Mental Health do not practice IV peripheral therapy
- It is the individuals responsibility to maintain their practice competency as there is no requirement for reendorsement
- If the staff member or approved person has not practiced IV management for over 12 months they are no longer considered IV certificated and must re endorse when they return to an IV management role
- IV therapy endorsed staff and approved persons must adhere to the Roles and Responsibilities Policy Vol 12

General IV Procedural Requirements

- Roles and responsibilities for staff and approved persons involved in medication and fluid management are outlined in the Roles and Responsibilities policy
- Use approved methods of medication and fluid reference (as per Associated Documents) or contact pharmacy

- A non-coring blunt needle will be used to draw up fluid from a poly amp
- A filter needle will be used when drawing up contents of a vial/glass ampoule
- Therapy effects, variances or complications must be documented within the patients clinical notes

Incremental syringe use

- With any incremental therapy, attach patient identification information and an additive label to the syringe. Do not reuse ampoules – discard appropriately.
- Use the same administrator for each incremental dose, and perform the double independent check procedure prior to each subsequent dose.
- A new syringe cap is to be attached after each incremental dose.
- Discard the syringe at the end of the shift/patient procedure.
- Controlled/Recorded drugs must be returned to the drug safe between incremental doses where the drug and patient will not be under constant surveillance by the administrator (e.g. ward settings). Refer to the Controlled and Recorded Drug Register Documentation and Monitoring Requirements Policy for information on discarding unused drugs.

Electronic Infusion Pump requirements

- Where Guardrails have been incorporated into infusion devices the technology will be used for all drug infusions listed within the required drug library profile set up for that area.
- Any changes to the dose/rate or time delivery of the infusion should be checked by 2 authorised persons (refer to the Roles and Responsibilities policy) and signed by both persons to confirm the correct patient and dose/rate.
- Pumps must have the alarm system activated at all times
- Pumps must be plugged into the mains power at all times when in the patient is not mobilising or when not in use
- In Child Health and Neonates ensure pump pressure settings are correct for the patient's age and infusion requirements
- Clean pumps with detergent and water and disinfect if required as per Infection Prevention and Control Policy

Line Changes and Labelling/Identification

- Label all IV lines with time and date of commencement
- Use an additive label where medication has been added to either the syringe or IV infusion bag
- Where multi drug infusion/administration is in progress all administration set **lines** must have the drug identified on the distal end of each line used
- Always trace tubing from the patient to the point of origin before connecting or bolusing
- Apply a patient label to the administration infusion line in situations where the patient will be disconnected/separated from the infusion temporarily, to ensure that the line correlates to the correct patient on reconnection
- Intermittent IV infusions require line/giving set changes after each administration

IV Giving Sets

- An IV giving set that is in use to infuse fluid or medication via a peripheral IV cannula **must be disconnected and discarded and not reconnected to a newly inserted or existing CVAD.**
- Reconnecting the existing IV giving set poses a risk for infection which compromises the patient, CVAD and the prescribed treatment.
- Continuous IV infusions require a line/giving set change at least every 72 hours (Exceptions: where specific medication requirements exist e.g. Blood and Blood products (blood filters changed every 8 hrs.),e.g. Ciclosporin and TPN lines changed every 24hrs
- A new sterile cap (Combi loc device) must be attached to the end of the giving set where a continuous infusion has been temporarily stopped for short periods of time to ensure asepsis is maintained. The end of the giving set must be cleaned with an antimicrobial swab and allowed to dry prior to attaching the Combi-loc
- Refer to Drug Information resources, pharmacy or other policy for clarification where required.

Child Health Specific IV Infusion Requirements

- An inline buretrol must be attached to the line
- The buretrol will have a maximum fluid volume of no more than 2 hours at any one time (to minimise the risk of inadvertent fluid or medication bolus)
- All fluid must be delivered via a volumetric pump
- These requirements also apply to Paediatric CVAD use

Intermittent Disconnection of an IV Giving Set

- A new sterile cap (combi loc device) must be aseptically attached to the end of the administration set when disconnecting the system from the cannula
- Do not attach the exposed end of the administration set to a port on the same infusion set ('looping') – this poses a risk of contamination

Cannula Management

Peripheral cannula are removed and/or replaced when 'clinically indicated'.

'Clinical Indication' is: (Refer to VIP score)

- If cannula is no longer required (treatment discontinued)
- VIP score of 2 or greater
- Cannula dysfunction e.g. resistance when flushing
- Cannula dislodgement/kinking

Management:

- Site and patient assessment
- Redress cannula using ANTT, clean site use 2% chlorhexidine & 70% alcohol swab
- Change dressing every 5-7 days if cannula is functioning, still required and site is not compromised
- Change dressing immediately if dressing becomes loose, damp, soiled, blood is present

Cannula Removal

- Change cannula when 'clinically indicated' or VIP score of 2 or greater **Exception:** Refer to Neonatal policy for neonates
- All **community placed** cannula must be identified and replaced as soon as practicable. Documented rationale is required in the clinical notes if the cannula has not been resited within 24 hours.
- Use the designated 'IV pressure pads' upon removal of the cannula, removing the pad after 1 hour.

Cannula flushing

- Where an extension set **has not been attached** at insertion and the patient requires more than 24hrs of IV therapy, an extension set must be attached aseptically. Extension sets minimise cannula movement and reduce the risk of complications.
- When flushing an extension set attached to the end of a cannula, use the clamp to provide positive pressure at the end of the flush to assist in avoiding red cell occlusion of the cannula

- A flush pre and post bolus/intermittent infusion administration must occur with at least 5 mLs IV 0.9% Sodium Chloride. These do not require prescribing
- With Intermittent medication therapy infusions the line must be flushed post administration with 30 mLs of 0.9% Sodium Chloride to ensure the patient receives the whole dose
- Where a 30 mL infusion line flush is required post administration this flush this will not require prescribing, you are administering the rest of the drug dose not the flush
- The recommended method for flushing an intermittent infusion line is to attach a 100ml bag of 0.9% Sodium Chloride and infuse 30 mLs of this
- Cannula must be flushed with 0.9% Sodium Chloride at least once per shift to maintain patency. When no IV medication/fluid administration is prescribed, the administrator must document this flush in the medication chart to ensure traceability

Documentation

- IV 0.9% Sodium Chloride flushes do not require documentation when used prior and post bolus or for intermittent therapy access/de access
- Exception: Flushes will be recorded on the fluid balance chart where the patient is haemo dynamically compromised or required as part of their Fluid Balance management

Visual Infusion Phlebitis Score (VIP)

- VIP score will be performed on each occasion prior to accessing the cannula or at least every 8hrs
- Patients with infusions who have been assessed as understanding the complications of the therapy will have their site monitored at each point of contact, and entered into Patientrack
- With infusions, sites will be monitored hourly and the VIP score entered into Patientrack for all children and adult patients who are unable to understand or communicate side effects of the therapy
- Where particular medication infusion instructions/policy exists follow these instructions for VIP assessment and documentation
- VIP scores are to be entered into Patientrack.
- Where a VIP score is 2> actions taken must be included.

VISUAL INFUSION PHLEBITSI SCORE (VIP)

Other IV Therapy considerations

- Refer to the Central Venous Access Device (CVAD) policy for CVAD management requirements
- Refer to Fluid Balance Management Policy in regard to recording IV fluid therapy
- For specific medications/fluids refer to local policy or the specific policy
- For incremental opioid administration refer to the policy
- Refer to Verbal Orders Policy for the documentation of IV verbal orders

Measurement and Evaluation

- Training database (healthLearn) will hold endorsed staff and approved persons
- Clinical practice observations will be performed in all areas of peripheral IV use. The managers will be responsible for implementing improvements
- Patientrack data
- Incident management reviews

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