MVH - PROCEDURE

ORIGINAL DATE: 05/18
REVISED:

SUBJECT: MEDICATION ROUTE: IV PUSH

PURPOSE: To outline care objectives and procedures for the clinical management of medication administered via IV Push.

PROCEDURE:

1. MVH has adopted the VNAA recommended Hospice and Palliative Care approach as outlined in Section: 12.11. (See attached)

Nature of Change	N/A - New
CCO Signature:	Julie Conway 5/21/18 Date
CEO Signature:	N/A Date

KEY POINTS

1. A bolus of a medication delivered by intravenous push (IVP) introduces a concentrated dose of medication directly into the systemic circulation via a vein.
   a. Many drugs cannot be given IV push and must be diluted and administered by infusion.
   b. Most home health agencies have policies about when and which medications can be given IV push. Check your policies.
2. Administer slowly.
   a. Do not write "IVP." Attempt to obtain and write orders as "IV over ___ minutes."
   b. Most drugs must be given slowly when given intravenously.
   c. Rapid infusion can cause numerous adverse effects from phlebitis to cardiac arrest.
   d. Always check the literature accompanying the drug to determine the maximal safe dose/minute.
   e. Calculate the number of minutes for the dose ordered (usually 2 to 5 minutes). Do not exceed this rate.
3. Safe administration of "IV over ___ minutes" drugs.
   a. Carefully calculate dose as bolus allows little margin for errors.
      1) Review amount of medication patient will receive each minute, recommended concentration, and rate of administration.
      2) Consider double checking with pharmacist or other nurse.
   b. If medication kept refrigerated, ensure it is at least at room temperature before administering. Consider putting vial under patient's arm to warm.
   c. Use 5 - 10 mL syringe for administration. Smaller syringes create too much pressure.
   d. Confirm venous access device is in vein prior to administration.
      1) Aspirate for blood before administering saline flush.
      2) Do not give if insertion site appears puffy, edematous or reddened, or if I.V. fluids do not flow at ordered rate. The medication could cause tissue injury.
4. Interest has grown in giving IV push furosemide as a way to address signs and symptoms of heart failure without emergency services or hospitalization.
   a. Maximal safe dose is 40 mg over 2 minutes in the community.
   b. Onset: 5 minutes. Peak: 30 minutes. Duration: 2 hours
   c. Do not administer IV diuretic if patient is hypotensive.
   d. Encourage high potassium diet (high in fruits and vegetables) after administration.
   e. Ask for follow-up lab orders to check on electrolyte status.

EQUIPMENT

Peripheral Line procedure, if need to establish venous access
Watch with second hand
Gloves
Antiseptic swab
Alcohol pads
2 prefilled saline flush syringes
1 prefilled heparin syringe, if ordered
Medication may come in pre-filled syringe OR
Syringe, 5 – 10 mLs Medication
Needleless port access device, if needed
2 x 2, if line will be pulled
Small adhesive bandage, if line will be pulled.
Biohazard sharps container

PROCEDURE

1. Identify patient using two identifiers. Adhere to Standard Precautions.
2. Check order for medication, dose, frequency, route, rate, pre and post saline flushes, and if heparin flush ordered.
3. Review medication information about IV administration of medication, especially maximal dose per minute, concentration and any other special precautions.
4. Prepare medication and flushes, if ordered to maintain line patency:
   a. Prepare 2 saline flush syringes with 3 – 5 mLs of normal sodium chloride.
   b. If heparin flush ordered, prepare heparin-flush syringe.
   c. Prepare ordered medication in a 5 – 10 mL syringe.
5. Explain procedure to patient.
6. Perform baseline assessment, including pulse, temperature and blood pressure.
7. Perform hand hygiene. Don gloves
8. If patient already has venous access device in place,
   a. Assess insertion site for signs of erythema or puffiness.
   b. If such signs present, choose a new site.
9. If patient does not already have an access device in place, follow *Peripheral Line* procedure for establishing a peripheral line. Attach a needleless cap, once line established.
10. To flush line:
    a. Cleanse injection port with antiseptic swab, and allow to dry.
    b. Insert saline flush syringe into port.
    c. Pull back gently on plunger and check for blood return.
    d. Flush line with saline flush.
    e. Remove syringe; discard in sharps container.

11. To administer medication:
    a. Cleanse injection port with antiseptic swab, and allow to dry.
    b. Insert syringe with medication.
    c. Slowly inject medication, using a stop watch to ensure no more than maximal dose/minute administered.
    d. After administration is completed, withdraw syringe; discard in sharps container.
12. If this is a one-time order only:
    a. Pull the venous access device. Discard in sharps container.
    b. Apply pressure with 2 x 2 until bleeding stops.
    c. Apply small adhesive bandage to site.
13. If line will be used again:
    a. Cleanse injection port with antiseptic swab, allow to dry.
    b. Insert sodium flush syringe and inject at same rate medication delivered, so as not to bolus the medication.
    c. Remove syringe, discard in sharps container.
    d. If heparin flush ordered, cleanse injection port with antiseptic swab, allow to dry.
    e. Insert syringe with heparin.
    f. Inject heparin at normal slow rate.
    g. Remove syringe, discard in sharps container.
14. Discard soiled supplies in appropriate receptacle.
15. Doff gloves. Wash hands.

AFTER CARE

1. Instruct patient/caregiver to report any adverse signs/symptoms at the site or systemically from medication effect.
2. Document in patient record:
    a. Medication name, flushes/amount pre and post, medication, dose, time and route.
    b. Response to medication/flushes, include any adverse reaction.
    c. Instructions given to patient/caregiver; comprehension.
    d. Communication with team members.

REFERENCES

Austin, J. Hockey, D., Williams, W. R., & Hutchinson, S. (2013). Assessing parenteral diuretic treatment of decompensated heart failure in the community. *British Journal of Community Nursing, 18*(11), 528 – 534.

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