



HEALTH HOLDING

HAFAER ALBATIN HEALTH
CLUSTER
MATERNITY AND
CHILDREN HOSPITAL

Department:	Nursing		
Document:	Internal Policy and Procedure		
Title:	Administration of Intravenous Medication by Push or Bolus		
Applies To:	All Nursing Staff		
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1. PURPOSE:

- 1.1 To achieve rapid therapeutic effect by delivering the drug directly into the circulatory system and ensure patient safety.

2. DEFINITONS:

- 2.1 **Intravenous (IV) push:** a significant amount of medication (diluted or undiluted) given directly to the vein over thirty to sixty (30-60) seconds.
- 2.2 **Slow IV push:** a specific amount of medication had given into the vein over three to five (3-5) minutes.
- 2.3 **Rapid IV push:** a specific amount of medication given into the vein over less than thirty (30) seconds.

3. POLICY:

- 3.1 The nursing staff must know the safe administration rate of injections that are commonly used in the scope of practice.
- 3.2 Medication by push or bolus must be performed by a nursing staff, following the ten (10) rights of medication administration.

4. PROCEDURE:

- 4.1 The nursing staffs verify the medication order on patient's medication form by checking against the physician's order.
- 4.2 Nursing staff should confirm patient's identity using 2 patient identifiers (four names for Saudi/ complete name for Non-Saudi and the medical record number).
- 4.3 Explains the procedure to the patient, answer patient's questions about the medication:
 - 4.3.1 The patient's blood pressure, pulse and respirations must be taken and recorded prior to and after administering some drugs such as narcotics.
 - 4.3.2 Monitoring of patient:
 - 4.3.2.1 The medication administered through IV push or bolus takes effect rapidly, so the patient must be monitored for adverse reaction such as cardiac arrhythmias and anaphylaxis.
 - 4.3.3 Administration of drug by direct injection, (IV Push/ bolus) can be given in any of the following.
 - 4.3.3.1 The injection site of an intravenous administration set.
 - 4.3.3.2 An adaptor or injectable plug into a cannula or winged infusion device.
 - 4.3.3.3 An extension set, multiple adaptor or stopcock (one, two or three-way).
- 4.4 Refer to hospital formulary or the pharmacist, if not sure about types of medication for IV push and rate of administration.
- 4.5 Knows the action, adverse effect and administration rate of medication to be injected.
- 4.6 Wash hands and wear gloves.

- 4.7 Prepares the prescribed medication, may dilute the medication if indicated by manufacturer.
- 4.8 Observe the ten rights of medication administration
- 4.9 Giving injection through an existing IV line.
 - 4.9.1 Check the compatibility of the medication with the primary IV solution or other admixtures already in the infusion.
 - 4.9.2 Close the roller clamp of the IV line.
 - 4.9.3 Close the flow of the IV fluid on the three way stop cock and open injection port
 - 4.9.4 Insert and lock the syringe without the needle into the port on the three way stop cock and inject medication at recommended rate.
 - 4.9.5 Withdraw syringe and close the injection port.
 - 4.9.6 Flush the line with normal saline to prevent drug precipitation.
 - 4.9.7 Open the IV fluid port on the three way stop cock and open the roller clamp on the IV tubing to return to ordered flow rate.
 - 4.9.8 Giving medication by direct Venipuncture.
 - 4.9.8.1 Select suitable vein in patient dorsal forearm, dorsum of the hand or another accessible location and palpate the vein for a firm rebound in sensation.
 - 4.9.8.2 Wash hands thoroughly and put on gloves.
 - 4.9.8.3 Tie a tourniquet 2 inches (5cm) proximal to area chosen.
 - 4.9.8.4 Clean the injection site with an alcohol swab, move the pad outward in a circular motion. Apply friction for 30 seconds or until the final swab comes away clean and allow the alcohol to dry on the skin.
 - 4.9.8.5 Immobilize the vein.
 - 4.9.8.6 Insert the needle at an angle of 30°. On blood return into the hub of the needle, remove the tourniquet.
 - 4.9.8.7 Inject the medication at the ordered rate.
 - 4.9.8.8 Place a sterile gauze pad over the injection site and slowly and gently remove the needle from the vein.
 - 4.9.8.9 Apply gentle pressure over the punctured site for 2 to 3 minutes. This prevents extravasation into the surrounding tissue.
 - 4.9.8.10 Apply a dry piece of dressing and plaster.
 - 4.9.8.11 Discard the syringe, needle and use gloves into the sharp yellow container and medical waste basket.
 - 4.9.9 Documentation :
 - 4.9.9.1 Record the drug administered, dose, date and time of injection, appearance of the site, duration of administration and patient's tolerance to procedure.
 - 4.9.9.2 Write the drugs effect and any adverse reaction and follow the procedure for reporting and inform the treating physician.
 - 4.9.10 Patient / family instructions:
 - 4.9.10.1 The patient and family should be told what drugs the patient is receiving and the use, as one of their rights to be informed.
- 4.10 Special consideration:
 - 4.10.1 IV bolus injection allows rapid drug administration; IV bolus or push injections are delivered directly into the circulatory system and can produce immediate effect.
 - 4.10.2 Before administering a medication by IV push or bolus the nursing staff should identify the proper rate and time, maximum amount recommended, concentration and any special precautions required for a particular medication.
 - 4.10.3 Bolus doses of medication may be injected directly through an existing IV line or through a cannula connected to a three way stopcock or direct venipuncture.

5. MATERIALS AND EQUIPMENT:

- 5.1 Gloves
- 5.2 Medications
- 5.3 Medication tray

- 5.4 Syringe
- 5.5 Tourniquet
- 5.6 Alcohol swab
- 5.7 Tape/ plaster
- 5.8 Sharp container

6. RESPONSIBILITIES:

- 6.1 Nurse






7. APPENDICES:

- 7.1 N/A

8. REFERENCES:

- 8.1 Jean Smith Temple and Joyce Young Johnson, Nurses Guide to Clinical Procedures, 5h Edition, Lippincott William And Wilkins, Page no: 225- 231.
- 8.2 MOH Medication Administration GNR 04-021.

9. APPROVALS:

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