Hemodialysis: Administration of IV Medications via the Venous Port During Hemodialysis

Site Applicability

PHC Hemodialysis Units

Practice Level

Registered Nurses (RN) and Licensed Practical Nurses (LPN) who have completed the required education and who provide nursing care in a PHC Renal Program Hemodialysis specialty unit.

LPNs working in hemodialysis settings administer solutions, substances and Schedule I, II and III drugs by any route, including intravenous and IV push, as part of routine hemodialysis procedures. BCCNM Scope of Practice, Standards Limits and Conditions, February 2023

Need to Know

- Body Substance Precautions <u>routine practices- infection control</u>
- Occupational Health and Safety <u>Blood and Body Fluid Exposures</u> (Sharps and Splash)
- Do not use needles with a diameter greater than 21 gauge (Hospals Hemoline Instruction. See information pamphlet under Specifications)
- Dialyzability of IV medications should always be checked prior to administration
- For preparation and administration of IV medication that are prepared by pharmacy, or prepared on the unit, refer to <u>B-00-12-10031</u> and the <u>Parenteral Drug Therapy Manual</u>

Equipment and Supplies

2 x alcohol swabs	Non sterile gloves
1x 3 mL syringe	Sharps bucket
1 x 22 gauge sharp needle, 1 inch length, with safety device	Prepared IV medication
Pre-filled medication syringe with needle guard (manufacturer prepared	Alaris pump and infusion set
1 x 50 mL Normal Saline bag (for flush)	

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Procedure

Steps	Rationale			
1. Preparation For either pre-filled or non prefilled syringe, and IV Antibiotics: a. Check Provider order for medication name, dose, time and route b. Perform hand hygiene c. Put on non-sterile gloves d. Prepare medication as directed by PDTM (if not prepared by pharmacy or manufacturer) e. For single use pre-filled syringe with needle guard: i. Take syringe from refrigerator ii. Check expiry date on syringe, ensure it is not damaged and liquid is clear and not frozen f. For IV antibiotics: i. Determine drug dialyzability ii. Consider the recommended time frame to infuse the medication completely	Do not use needles with a diameter greater than 21 gauge (Hospals Hemoline Instruction. See information pamphlet under Specifications)			
 Administration For either prefilled syringe or non prefilled syringe, and IV antibiotics: a. Perform Closed Loop Medication	Identifies correct medication and correct patient following organizational policies and guidelines Prevent transmission of organisms			

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	d. Take the cap off the syringe needle		, , ,	
	e. Insert the needle into the centre of the			
	venous port at a 90 degree angle to the			
	port			
	f. Inject the medication into the venous			
	port. Follow specific directions as			
			cated for each medication	
	g. Withdraw the needle and immediately			
	discard the needle and syringe into the			
			rps container. DO NOT recap the	
			dle.	
	h.		ng prepared IV medication and 1 x 50	
	mL NS bag to the IV pole.		=	
		i.	Prime IV infusion set with IV	Ensure tubing is free of air
			medication and load to the IV	
			pump	
		ii.	Connect IV infusion line to the	
			venous luer lock port of the	
			hemodialysis line or to one of	
			the ports of the venous	
			chamber	
		iii.	Program the Alaris pump	
		iv.	When the medication bag is at	
			one third level of the drip	
			chamber, flush with 20 mL	
			normal saline from the second	Ensures total dose of the medication is
				administered
3.	mini bag 3. Clean up			
პ.	Cie		•	
		a.	Wipe any blood from the venous port with an alcohol swab	
		b.	Remove gloves and perform hand	
		IJ.	hygiene	
		c.	Observe patient for response to the	
		С.	medication	
		d.	Complete documentation tasks	

Documentation

- 1. Complete medication administration tasks on MAR
- 2. Document patient response to medications and any nursing interventions for adverse medication effects in a narrative note in PowerChart

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Patient and Family Education

- 1. Provide patient with information about each medication and what it is indicated for
- 2. Instruct patient to report any side effects or adverse reaction to IV medication especially when it is the first dose they have received

Related Documents

- 1. B-00-12-10031 Hemodialysis: Administration of IV Iron Preparations during hemodialysis
- 2. Parenteral Drug Therapy Manual
- 3. Occupational Health and Safety <u>Blood and Body Fluid Exposures (Sharps and Splash)</u>

References

Adult Parenteral Drug Therapy Manual (2023). Accessed at http://pdtm.vch.ca/

British Columbia College of Nurses and Midwives. (2023). Scope of practice, standards, limits and conditions. Retrieved March 27, 2023 from https://www.bccnm.ca

Intravenous Therapy: Priming and changing a solution. Elsevier Clinical Skills (2022). St. Louis, MO. Elsevier. Retrieved Month Day Year from www.elsevierskills.com

Janssen Canada. (2023). EPREX product monograph. Retrieved April 20, 2023 from eprex cpm.pdf (janssen.com)

Provincial Health Services Authority: British Columbia Renal. Dialyze IHD: Dialyzabilty of medications during intermittent hemodialysis. Nursing Poster Presentation and Chart. Retrieved April 20, 2023 from http://www.bcrenal.ca/resource-gallery/layouts/15/DocIdRedir.aspx?ID=BCPRA-31-462.

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Groups/Persons Consulted:

Renal Clinical Practice Group

Developed/Revised By:

Nurse Educator, Hemodialysis

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(committee or position)	Professional Practice Standards PHC Renal Clinical Practice Group
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