

ASSESSMENT & ROUTINE CARE OF A PATIENT WITH VASCULAR ACCESS – CVL or PIV

Document Owner:

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Purpose of Document(s):

Quick reference guide for assessing and providing routine care to patients at BC Children's Hospital that have vascular access – Central Venous Line (CVL) or Peripheral Intravenous (PIV)

Applicability

BC Children's Hospital

Version History

DATE	DOCUMENT NUMBER and TITLE	ACTION TAKEN
03-Oct-2018	CV.03.38 Assessment & Routine Care Of A Patient With Vascular Access – CVL or PIV	Approved at: BCCH Best Practice Committee

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ASSESSMENT & ROUTINE CARE OF A PATIENT WITH VASCULAR ACCESS – CVL or PIV

	LONG TERM EXTERNAL CUFFED CVC		APHERESIS CATHETERS		SHORT TERM EXTERNAL CVC		PICC (cuffed or uncuffed)		IMPLANTED PORT		PIV/EPIV		DIALYSIS CVC (Hemodialysis or CRRT Vas cath)	
Clamps	Plastic clamps on line & 1 metal ("bulldog"). Ensure clamp is placed over protective clamping sleeve.		Plastic clamps on line & 1 metal ("bulldog"). Ensure clamp is placed over protective clamping sleeve.		On extension		On extension		On Huber needle		On extension		**For Hemodialysis catheters, contact the renal dialysis nurse clinician for clarification of orders and care required** ***Must be identified with a coloured medication label stating the solution instilled (citrate 4% -yellow, or heparin - green), dosage, concentration, and amount/volume instilled and the date the CVC was locked** ALWAYS WITHDRAW LOCKING SOLUTION FROM DIALYSIS/ CRRT CATHETERS PRIOR TO FLUSHING OR INITIATING AN INFUSION	
Extension	Not required		Not required		1 on each lumen		1 on each lumen		Not recommended		Not required			
Tubing Change	Q 96 hrs for most infusions Exceptions: Blood products q4h; lipids q24h; certain medications/infusions: see specific guidelines													
Dressing Change	**Do not change initial dressing within first 24hrs, consult IV team if required** Q7 days with transparent dressing Q2-3 days if gauze/mepore being use PRN if dressing soiled or no longer occlusive.		Same as cuffed CVC. Apply appropriate STAT LOCK securement device for Medcomps and for PowerLines if stitch removed from wings.		Same as cuffed CVC. Use Tegaderm CHG dressing as first choice for patients greater than 2 months old. ** Do not use Tegaderm CHG in Oncology Patients**		Cuffed PICC: same as cuffed CVC; can be done by unit RN. Non-cuffed PICC: Q7-10 days and PRN by IV Team RN. Use Tegaderm CHG as first choice. If Tegaderm CHG not used, apply STATlock device for securement. ** Do not use Tegaderm CHG in Oncology Patients**		Q7 days with needle change and PRN if dressing soiled or no longer occlusive		PIV: Not routinely done; PRN by ward nurse or IV team nurse. ePIV: Q 7 days by IV team nurse.			
Needleless cap Change	<ul style="list-style-type: none"> • <u>Microclave Clear</u> neutral displacement caps are used on all PIVs/EPIVs and IV syringe tubing. • <u>Neutron</u> neutral displacement caps (with extra valve) are used on all CENTRAL LINES • Q 96 hours (weekly at home) 								<ul style="list-style-type: none"> • With each administration set replacement (as per Administration Set Table recommendations) • if integrity of the cap is compromised • if any residual blood remains within the cap after flushing 					
Anticoagulant locking	2 times per week (Mon/Thurs)		Q 24 hrs.		Q 24 hrs.		Q 24 hrs.		Prior to de-access or following intermittent access. Q 28 days when not accessed.		Saline lock Q12hrs. (for ambulatory patients on q24h antibiotics, flush daily)		Following dialysis treatment or 3 times per week	
Needle Change	N/A		N/A		N/A		N/A		Q 7 days		PRN			
TKVO rate	> 50 kg	< 50 kg	Apheresis Catheters PowerLines & Medcomps always 10mls/hr		> 50 kg	< 50 kg	> 50 kg	< 50 kg	> 50 kg	< 50 kg	> 50 kg	< 50 kg	> 50 kg	< 50 kg
	10mls/hr	4mls/hrs			10mls/hr	4mls/hrs	10mls/hr	4mls/hrs	10mls/hr	4mls/hrs	10mls/hr	4mls/hrs	10mls/hr	4mls/hrs
PICU TKVO	Same as above				In PICU 2mls/hr 1ml/hr hep solutions		Same as above		Same as above		In PICU 1ml/hr			
Suture removal	Should be absorbable (otherwise remove on day 28)		No		No Yes in PICU		N/A		N/A		N/A			
Blood Work	Yes		Yes		Yes		Yes (if ≥ 3 Fr single or from larger lumen (≥ 20 Gauge) only of ≥ 4 Fr double).		Yes		Generally NO (okay in special circumstances and when initiating IV)			
	> 10 kg	< 10 kg	> 10 kg	< 10 kg	> 10 kg	< 10 kg	> 10 kg	< 10 kg	> 10 kg	< 10 kg	> 10 kg	< 10 kg	> 10 kg	< 10 kg
Discard sample	3 mL	1.5 mL	3 mL	1.5 mL	1.5 mL		3 mL	1.5 mL	3 mL		1 mL special circumstances only		3 mL	
Saline Flush (use 10mL pre-filled syringes)	9 mL	3 mL	9 mL REGARDLESS OF PATIENT WEIGHT		3 mL		9 mL	3-9 mL as needed to clear cap	18 mL (use 2 x 10 mL)	9 mL	9 mL	3-9 mL as needed	18 mL (use 2 x 10 mL)	
Heplock Solution 10 units/mL (use 10 mL pre-filled syringes)	2.5 mL	1.5 mL	2.5 mL REGARDLESS OF PATIENT WEIGHT		1.5 mL		1.5 mL REGARDLESS OF PATIENT WEIGHT		2.5 mL REGARDLESS OF PATIENT WEIGHT		N/A		Citrate Lock ***Must have an order from Nephrology (hemodialysis patients) or Intensivist/Fellow (PICU patients)**	