

Flushing Guidelines for Venous Access Devices

WARNING:

HEPARIN is potentially a dangerous drug.
Higher strengths of HEPARIN given regularly to small babies could lead to full anti-coagulation.
Ensure that the correct strength of HEPARIN is prescribed and administered.

GROSHONG CENTRAL VENOUS CATHETER

This catheter has a slit valve at the tip to prevent backflow of blood into the catheter, unlike open ended catheters.
HEPARIN should not be required to maintain patency and saline should be used for flushing (the manufacturer recommends 5ml SODIUM CHLORIDE 0.9% INJECTION once weekly).

CENTRAL VENOUS HAEMODIALYSIS CATHETERS

Please refer to specialist guidance for these lines.

PLEASE NOTE

This guidance may need to be adjusted, on the advice of a consultant, in patients receiving therapeutic Heparin.



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<u>Vascular Access Device</u>	<u>0.9% sodium chloride</u>	<u>10unit/ml heparin sodium flushing solution</u>	<u>100units/ml heparin sodium flushing solution</u>	<u>Flush frequency</u>	<u>Blood sampling</u>
<u>Peripheral cannula</u>	2 - 4ml	NO	NO	<ul style="list-style-type: none"> • Before and after every access • When not in use 6-8 hourly 	Not recommended for blood sampling
<u>Long lines 8 and 20cm (midlines)</u>	2 - 4ml	2ml	NO	<ul style="list-style-type: none"> • 0.9% sodium chloride before and after every access • Heparin 10units/ml after every access following 0.9% sodium chloride. • When not in use daily 0.9% sodium chloride followed by heparin 10 units/ml 	Not to be used for blood sampling
<u>Peripherally inserted central catheters (PICC) 2fr DOUBLE lumen Twinflow Nutriline</u>	2 - 4ml	2ml	NO	<ul style="list-style-type: none"> • 0.9% sodium chloride before and after every access • Heparin 10units/ml after every access following 0.9% sodium chloride. • When not in use 0.9% sodium chloride 0.5ml/hr continuous infusion 	Not to be used for blood sampling
<u>Peripherally inserted central catheters (PICC) 2fr SINGLE lumen Nutriline</u>	2 - 4ml	2ml	NO	<ul style="list-style-type: none"> • 0.9% sodium chloride before and after every access • Heparin 10units/ml after every access following 0.9% sodium chloride. • When not in use daily 0.9% sodium chloride followed by heparin 10 units/ml 	Not to be used for blood sampling
<u>Peripherally inserted central catheters (PICC) 3FR gauge and above</u>	2 - 4ml	2ml	NO	<ul style="list-style-type: none"> • 0.9% sodium chloride before and after every access • Heparin 10units/ml after every access following 0.9% sodium chloride. • When not in use weekly 0.9% sodium chloride followed by heparin 10 units/ml <p>**</p>	Not recommended for regular blood sampling <ul style="list-style-type: none"> • If used for blood sampling flush with 0.9% sodium chloride followed by heparin 10 units/ml

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<u>Acute central lines (jugular, femoral)</u>	2 - 4ml	2ml	NO	<u>Treat each lumen individually</u> <ul style="list-style-type: none"> 0.9% sodium chloride before and after every access When not in use daily 0.9% sodium chloride followed by heparin 10 units/ml 	Not recommended for regular blood sampling If used for blood sampling flush with 0.9% sodium chloride followed by heparin 10 units/ml
<u>Broviac/Hickman lines</u>	2 - 4ml	2ml Not required if accessed within 24 hours	NO	<u>Treat each lumen individually</u> <ul style="list-style-type: none"> 0.9% sodium chloride before and after every access if accessed within a 24 hour period If accessed once per day 0.9% sodium chloride followed by heparin 10 units/ml* When not in use weekly 0.9% sodium chloride followed by heparin 10 units/ml ** 	Not recommended for regular blood sampling <ul style="list-style-type: none"> If used for blood sampling flush with 0.9% sodium chloride followed by heparin 10 units/ml
<u>Porta Cath***</u>	4 - 5ml	4 - 5ml	End of treatment course when gripper removed and at monthly flush. 4 – 5ml	<ul style="list-style-type: none"> 0.9% sodium chloride before and after every access Heparin 10units/ml after every access following 0.9% sodium chloride. End of treatment course when gripper removed 0.9% sodium chloride followed by heparin 100units/ml If gripper changed during course just flush with heparin 10units/ml 	Not recommended for regular blood sampling <ul style="list-style-type: none"> If used for blood sampling flush with 0.9% sodium chloride followed by heparin 10 units/ml, if gripper remaining insitu If used for blood sampling flush with 0.9% sodium chloride followed by heparin 100 units/ml, if gripper being removed

* For patients with pro-coagulant condition, e.g. Nephrotic Syndrome, follow guidance for intermittent drug administration

** The frequency may be increased as necessary, up to daily, to maintain line patency

*** On insertion of gripper needle aspirate to ensure patency and correct placement of gripper needle prior to flushing

Central Venous Catheter for Plasma Exchange on a General Ward

For Renal Replacement (dialysis) Therapy patients please discuss with renal team **before** using / accessing central line.

Vascath / permacaths should be accessed using **SURGICAL ANTT**

Before accessing / flushing, using a 10 ml syringe aspirate the instilled heparin from the catheter minimum 3 mls (check the catheter for volume amount). Then proceed with flushing following volumes below.

IF patency is compromised e.g. line clotted - **do not** proceed, and inform the medical team

<u>Vascular access Device</u>	<u>0.9% sodium chloride</u>	<u>10unit/ml heparin sodium flushing solution</u>	<u>100units/ml heparin sodium flushing solution</u>	<u>Flush frequency</u>	<u>Blood sampling</u>
Vascath/Permacath	<u>Treat each lumen individually</u> 5ml	NO	<u>YES</u> volume determined by catheter length plus 0.5ml	<u>Treat each lumen individually</u> <ul style="list-style-type: none"> • 0.9% sodium chloride before and after every access • When not in use weekly 0.9% sodium chloride followed by heparin 100 units/ml 	Not recommended for regular blood sampling. <ul style="list-style-type: none"> • If used for blood sampling flush with 0.9% sodium chloride followed by heparin 100 units/ml

FLUSHING GUIDELINES FOR VENOUS ACCESS DEVICES

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Name of originator/author:	Sara Melville (Lead Nurse - IV Therapy)
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11	Feb 23	Sara Melville	Current	
10	Dec 20	Sara Melville	Archived	
9	Jun 20	Sara Melville	Archived	
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7	Jan 17	Sara Melville	Archive	
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5	Apr 12	Sara Melville	Archived	
4	Feb 10	Sara Melville	Archived	Hard copy only
3	Jul 07	Pauline Brown, Mr Rick Turnock	Archived	
2	Mar 05	Medicines Information	Archived	
1	Jul 96	Drug Information	Archived	

Review and Revision(s) Log

Record of revision(s) made to guidelines since Version 1

Section Number	Page Number	Revision(s) made	Reason for revision(s)
N/A	v10 Page 2	Added 2fr DOUBLE lumen Twinflow Nutriline and 2fr SINGLE lumen Nutriline	Updated
	(v7,8)	Please refer to archive	
	(v6)	Reformatted and minor changes	To make easier to read
Broviac and Hickman Lines	(v5) Pg 3	Flush once weekly (instead of daily) Point on increasing frequency added	To standardise hospital and home practice when line not in use. Will reduce risk of infection.
	v1-v4	See file for previous revisions	