

Appendix G: Care of Patient with a Tunneled Central Venous Catheter of Implanted Port (Hickman, Groshong)

Recommendations for Use	A tunnel catheter or an implanted port is strongly recommended for patients in whom more than 6 weeks of vascular access is anticipated and for whom a PICC may not be appropriate (chemotherapy, CPN)
Insertion Considerations	<ol style="list-style-type: none"> 1. Tunneled VADs, implanted ports, and permanent dialysis/pheresis catheters shall only be placed in CVIL/IRC or the operating room (OR). 2. A central venous catheter with the minimum number of ports or lumens essential for the management of the patient shall be used.
Dressing/ Site Care	<ol style="list-style-type: none"> 1. For new tunneled central VADS, a nurse shall assess the site and dressing when the patient returns from OR/CVIL/IRC and shall dress the site with gauze dressing until the site is no longer oozing. Gauze dressing should be changed daily if not converted to semi-permeable dressing within 24 hours. 2. A semi-permeable polyurethane sterile transparent dressing in the appropriate size shall be used and is changed every 7 days or whenever it becomes soiled or unocclusive. Anytime dressing is removed or opened, site care should be performed and a new dressing applied according to standard procedure. 3. Patients who have skin breakdown or oozing, an occlusive gauze dressing may be used, and changed when soiled or every 24 hours. Gauze dressings may also be used for patients who do not tolerate a semi-permeable transparent dressing. Routine gauze dressing is changed every 48 hours. 4. Topical antibiotic ointment or cream shall not be used as prophylaxis on insertion sites 5. For patient showering, the site, catheter and connecting devices shall be covered with an impermeable dressing and the dressing shall be changed immediately after the shower 6. Central VAD dressing change is a sterile procedure and is located in the Nursing Practice and Organization Manual, IV Therapy: Central Venous Access Device, Procedure for changing dressing, #341.
Implanted Port Dressing Access/ Reaccess	<ol style="list-style-type: none"> 1. Ports shall be re-accessed within a sterile field using a new Huber needle every 7 days; the needle, extension tubing and dressing shall be changed at that time (requires documented competency) Where applicable, VAT should be notified to access and follow patients with implanted ports for the q 7 day reaccess and dressing change.

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<p>Blood Draws</p>	<ol style="list-style-type: none"> 1. A syringe barrel size of 10cc or greater shall be used to flush any VAD to avoid excessive PSI and possible rupture of catheter or dislodgement of clot. 2. Blood may be drawn from central VADs by individuals with specialized training. <ol style="list-style-type: none"> a. On general care units (exception Oncology and Pediatrics) central line blood sampling should be performed by the VAT whenever possible. 3. Blood cultures should NOT be obtained from central lines routinely. Central lines should be used for blood cultures only if adequate blood cultures cannot be obtained peripherally (see Blood Culture protocol at http://www.insidehopkinsmedicine.org/nursing/cnp/307blood_culture.pdf). 4. Blood may be drawn from the distal port (largest) of central VADs, ensuring all other lumens are clamped. 5. The first 6cc of blood shall be discarded and the lumen shall be flushed with 10cc bacteriostatic 0.9% Normal Saline Solution (NSS) after sampling. 6. After blood sampling, line should be flushed with NSS according the flushing guidelines for tunneled central venous catheters or implanted port. 		
	<p>Flush Solution</p>	<p>Volume</p>	<p>Frequency:</p>
<p>Flush for Tunneled or Cuffed VAD - Hickman, Groshong</p>	<p>NSS Flush</p>	<p>10 ml NSS each lumen</p>	<ol style="list-style-type: none"> 1. After blood sampling 2. Before and after administering incompatible medications or fluids 3. When converting from continuous to intermittent use. 4. When a lumen is not in continuous use: <ol style="list-style-type: none"> a. after administering fluids/medications 5. At least daily
	<p>Following NSS Flush and WHEN ORDERED BY MD: Heparin Lock:</p>	<p>6 mL Heparin 10 units/ mL each lumen</p>	<ol style="list-style-type: none"> 1. After blood sampling 2. When converting from continuous to intermittent use. 3. When a lumen is not in continuous use: <ol style="list-style-type: none"> a. after administering fluids/medications 4. At least daily.

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	Flush Solution:	Volume:	Frequency:
Flush for Port* <i>(*Call VAT when a patient with a port is admitted or scheduled for discharge, where applicable)</i>	NSS FLush	20 ml NSS each lumen	<ol style="list-style-type: none"> 1. After blood sampling 2. Before and after administering incompatible medications or fluids 3. When converting from continuous to intermittent use. 4. When not in continuous use: <ol style="list-style-type: none"> a. after administering fluids/ medications 5. At least daily
	Following NSS Flush and WHEN ORDERED BY MD: Heparin Lock:	6 mL Heparin 10 units/mL each lumen	<ol style="list-style-type: none"> 1. After blood sampling 2. When converting from continuous to intermittent use. 3. When not in continuous: <ol style="list-style-type: none"> a. after administering fluids/ medications 4. At least daily.
	Flush Solution/Medication	Dose/Volume	Frequency
Port-De-Accessing* (Needle Removal)	NSS Flush	20 ml NSS	Whenever de-accessing port
	Heparin Lock: Following NSS Flush and WHEN ORDERED BY MD:	6 ml Heparin 100 units/ml	Whenever de-accessing port
Removal	See VAD Protocol section E Removal.		