## Appendix F: Care of Patient with Short Term Central Venous Catheter

<table>
<thead>
<tr>
<th>Recommendations for Use</th>
<th>For short term use (days to weeks). Used to deliver critical medications, IV fluids, access for blood drawing, hemodynamic monitoring, temporary pacing access and temporary dialysis</th>
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</thead>
</table>
| **Insertion Considerations**                                                           | 1. When placing a central catheter, knowledge of the existence of other venous devices is important as it can impact the technique utilized for placement or rewiring. For instance:  
   a. Inferior vena cava filter; use of the j end of the wire could cause dislodgement of filter. Straight end of wire recommended  
   b. Pacing wires- there is a risk for dislodgement during CL placement or rewiring.  
   Be prepared for possible complications (e.g., cardiac arrhythmias, hemodynamic instability).  
   c. Venous Stent: Percutaneous access should be avoided in a vessel with a stent unless no other access site is available and access is urgent or emergent.  
   2. The subclavian vein is the preferred site for non-tunneled central venous access; however, patient-specific factors which may make the subclavian vein less preferred (e.g., renal failure, coagulopathy, anatomic deformity or cardiothoracic surgery), operator skill, and relative risk of mechanical complications (e.g., subclavian vein stenosis, bleeding, pneumothorax), shall also be considered and shall guide site selection.  
   3. A central venous catheter with the minimum number of ports or lumens essential for the management of the patient shall be used.  
   4. Hohn catheters are placed in the CVIL/CVIR or the line room and should be removed or changed after 6 weeks due to dissipation of the antimicrobial in the cuff.  
   5. For patients considered high risk, which is defined by previous difficulty in placing a line, body mass index > 30 or < 20, history of thrombosis or stenosis, or supervisor (or second operator) has failed greater than 3 attempts, consider contacting Interventional Radiology for line placement.  
   6. Follow guidelines as described in Adult Vascular Access Device (VAD) Policy, including use of Central Line Insertion Care Team Checklist.  
   7. Use of large-caliber temporary central VADs, such as introducers/sheath devices (e.g. Cordis,14 gauge without integral extension), is limited to the ICU, IMC, ED, OR, PACU, CVIL and CVIR( exception; dialysis catheters). These catheters should be removed/replaced prior to transfer to general care areas.  
   8. Large caliber catheters are occasionally placed on the floor during emergencies before transfer to the ICU or OR. |

| **Dressing/Site Care**                                                                 | 1. 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 preformed and a new dressing applied according to standard procedure.  
   2. 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.  
   3. Topical antibiotic ointment or cream shall not be used as prophylaxis on insertion sites.  
   4. 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. |

### Blood Draws

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.
   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](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 0.9% Normal Saline Solution (NSS) after sampling.

6. After blood sampling, line should be flushed with NSS and heparin, if ordered, according to the flushing guidelines for Short-term central venous catheters.

### Flush Solution

<table>
<thead>
<tr>
<th>Flush for Short Term Central Lines including Hohn</th>
<th>Volume</th>
<th>Frequency:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSS Flush:</td>
<td>10 mL NSS each lumen</td>
<td>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: a. after administering fluids/medications b. at least every 8 hours For Hohn Catheter - at least daily</td>
</tr>
<tr>
<td>Following NSS Flush and WHEN ORDERED BY MD: Heparin Flush</td>
<td>6 mL Heparin 10 units/ mL each lumen</td>
<td>1. After blood sampling 2. When converting from continuous to intermittent use. 3. When a lumen is not in continuous use: a. after administering fluids/medications b. at least every 8 hours (For Hohn Catheter - at least daily)</td>
</tr>
</tbody>
</table>