Appendix L: Accessing/Deaccessing Implanted Central Venous Access Port

<table>
<thead>
<tr>
<th>Recommendations for Use</th>
<th>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).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion Considerations</td>
<td>Implanted ports shall only be placed in CVIL/IRC or the operating room (OR)</td>
</tr>
<tr>
<td>Implanted Port Dressing Access/ Reaccess</td>
<td>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 shall be notified to access and follow patients with implanted ports for the every 7 day reaccess and dressing change. (See below for Power Injectable Port procedure)</td>
</tr>
</tbody>
</table>

### Septum

![Septum Diagram](image)

### Implant Port Access/ Reaccess

1. Obtain authorized prescriber order to access implanted port
2. Assess patients pain tolerance and previous experience with port accessing and need for transdermal anesthetic cream
3. Obtain authorized prescriber order for transdermal anesthetic cream for application to skin over accessing area, if indicated.
4. Identify patient
5. Assess location of port and septum to be accessed, note any redness, edema, pain or drainage and report any of these to the authorized prescriber
6. Explain procedure to patient
7. Assess appropriate Huber (non-coring) needle size based on location of port septum and patient body type (patient may be aware of their usual needle gauge and length). Never use any other needle to access an implanted port, coring of the septum can occur causing damage. Available sizes and lengths of Huber Plus Safety Needles.
   - 22G- 1/2 inch, 22G- 3/4 inch, 22G- 1 inch, 22G- 1 1/2 inch
   - 20 G- 3/4 inch, 20G- 1 inch, 20G- 1 1/4 inch, 20G- 1 1/2 inch
8. For first attempt, if previous needle size is undeterminable, utilize a 22 gauge, 1 ½ inch Huber needle
9. Ideally, the 90 degree turn of the Huber shall rest as close to the skin as possible. A gap greater than ¼ inch indicates a shorter needle shall be utilized for future accessing.
10. Apply transdermal anesthetic cream 1 hour prior to accessing and cover with a transparent dressing.
a. Thoroughly remove transdermal cream with a sterile 2x2 gauze pad prior to cleansing port in preparation for accessing

11. Gather supplies
12. Wash hands thoroughly and palpate infusion port with clean gloves on
13. Apply mask to patient and self
14. Open sterile gloves
15. Utilize inside of sterile glove wrapper as a sterile field
   a. Drop Chloraprep, tegaderm dressing, needleless valve, skin prep, one empty sterile 10-cc syringe, and one sterile Huber needle of appropriate size onto sterile field
   b. Open second set of sterile gloves
   c. Open three syringes of prefilled normal saline (do not place on sterile field)

16. Remove clean gloves
17. Don sterile gloves
   a. Remove cap on end of sterile Huber needle connection tubing
   b. With non-dominant hand, hold sterile Huber needle connection tubing in preparation for priming
   c. With dominant hand, attach prefilled syringe (which is not sterile) to Huber needle connection tubing and prime Huber needle
   d. With the non-dominant hand, lay primed Huber needle and tubing on sterile field (with non-sterile syringe only touching outer area of sterile field)
   e. Clamp Huber needle connection tubing
   f. Remove syringe
   g. Maintain Huber needle and connection tubing on sterile filed at all times

18. Don new sterile gloves
   a. Attach empty sterile 10cc to Huber needle connection tubing
   b. Cleanse skin over port with Chloraprep, using a scrubbing motion while cleaning in concentric circles
   c. Allow Chloraprep to dry for 60 seconds
   d. Grasp edge of port with non-dominant hand to stabilize the port
   e. Insert the Huber needle into the center of the port septum going through the skin at a 90-degree angle. Apply steady pressure until the needle touches the base of the port reservoir.
   f. Aspirate to check for a blood return
   g. Attach needleless valve to end of Huber connection tubing

19. Apply skin prep
20. Apply Tegaderm dressing
21. Flush Huber needle connection tubing with 20 cc normal saline (per VAD policy)
22. Attach IV tubing
23. If unsuccessful port access, repeat above steps for reaccess attempt
24. If still unsuccessful, notify VAD team member for consultation

De-Access

1. Obtain authorized prescriber order to access implanted port
2. Identify patient
3. Explain procedure to patient
4. Gather supplies
5. Wash hands thoroughly  
6. Apply mask to patient and self  
7. Open a sterile gauze 2x2 pad or a sterile band aid  
8. Don clean gloves  
   a. Flush port catheter with 20 cc normal saline  
   b. Heparin lock port catheter with appropriate amount of heparin per VAD policy  
   c. Remove dressing  
   d. Use non-dominant hand to stabilize port  
   e. Using dominant hand, gently remove Huber needle using safety needle device per manufacturers guidelines  
   f. Discard Huber needle in sharps container  
   g. Cover site with dry sterile gauze dressing or band aid

### Blood Draws

<table>
<thead>
<tr>
<th>Flush Solution:</th>
<th>Volume:</th>
<th>Frequency:</th>
</tr>
</thead>
</table>
| **Flush for Port** (*)  | **NSS Flush**                  | 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:  
                           | a. after administering fluids/medications  
                           | 5. At least daily |

**Following NSS Flush and WHEN ORDERED BY AUTHORIZED PRESCRIBER:**

<table>
<thead>
<tr>
<th>Flush Solution/Medication</th>
<th>Dose/Volume</th>
<th>Frequency:</th>
</tr>
</thead>
</table>
| **Heparin Lock:**         | **6 mL Heparin (10 units/mL)**     | 1. After blood sampling  
                           | 2. When converting from continuous to intermittent use  
                           | 3. When not in continuous use:  
                           | a. after administering fluids/medications  
                           | 4. At least daily |

### Port De-Accessing

<table>
<thead>
<tr>
<th>(Needle Removal)</th>
<th><strong>NSS Flush</strong></th>
<th>20 ml NSS</th>
<th>Whenever de-accessing port</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Heparin Lock:</strong></td>
<td><strong>6 ml Heparin 100 units/ml</strong></td>
<td></td>
<td>Whenever de-accessing port</td>
</tr>
</tbody>
</table>
### Following NSS Flush and WHEN ORDERED BY AUTHORIZED PRESCRIBER:

| **Power Injectable Port:** Recommendations for Use | The Power Port is the first implantable port indicated for power injection when used with Power Loc Safety Infusion Set. Available size and length of this needle (20g x 1 inch)
This port allows contrast dye to be power-injected for patients having a CT scan. It is also MRI safe.
The power port also has a radiographic plate on the back which can be distinguished on a chest X ray by an authorized prescriber. |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------|

### Implanted Power Injectable Port Access/Re-access

(Power Injectable Ports are only accessed with a Power Loc Safety Infusion Set by the following individuals who have received competency training: JHH Venous Access Team, Oncology PICC Team, Oncology CNS’S, Oncology OPD RNs Radiology RNs)

1. The trained and competent practitioner accessing the port must verify that the patient has an implanted power port device using at least two validation points:
   a. Feel for triangular shaped port
   b. Feel for three palpation points (bumps) on the port septum
   c. Verify patient has a Power Port device patient ID card
   d. Verify via radiographic study that patient has a Power Port.
   e. Document at least two validation points in the patient’s medical record.
   f. Validate presence of blood return prior to use
   g. Place device verification sticker on infusion set indicating that the port is a power port.

2. After validating presence of a Power Port access port and only using the power loc safety infusion set, follow Access/De-access procedure above. Procedure for flushing, as above, remains the same.

3. Nurses who are trained and competent in accessing non-Power Port implanted central venous access ports MAY access a Power Port with a regular Huber needle (non- Power Loc), if necessary.