A. ACCESSING SURGICALLY IMPLANTED PORTS AND INFUSION OF FLUIDS

PURPOSE:

The Implantable Port is used to infuse fluids for those patients requiring long or short term therapy for hyperalimentation, medications, or blood administration.

NOTE: 1. The use of a needle injector device utilized for administration of IV contrast by Radiology staff is contraindicated. (Unless verification of a power port has been performed. Verification can be performed by looking at Chest X-Ray (“CT” can be visualized on port), parent confirmation, or by reviewing Operative Report of Power Port placement.

2. A peripheral IV using a needle greater than or equal to 22 gauge must be inserted for administration of contrast.

3. PET/CT procedures will require a 24 gauge or greater peripheral IV, if having a diagnostic CT performed with the PET follow the guidelines of 1 and 2 above.

PERFORMED BY: RNs and LVNs with demonstrated and documented competency.

EQUIPMENT:

1. Small Central Line Dressing Kit required
2. Sterile gloves if kit gloves are ill fitting
3. Transparent occlusive dressing
4. 10ml sterile pre-filled normal saline syringed
5. Huber Needle – 90° right angle*
6. Injection Cap
7. Extra mask for anyone who is within 3 feet of the procedure
8. Heparin flush per Heparin policy (PS 096)

*NOTE
Only a Huber needle is to be used with an Implantable Port. Huber needles come in various lengths – choose the one appropriate for your patient as determined by the amount of fatty tissue and skin that must be penetrated on insertion.

**PROCEDURE**

1. Wash hands.

2. Position patient either flat on their back or they may remain in seated position if they are able to remain still for procedure.

3. Locate injection site of Implantable Port by palpation.

4. Use hand gel.

5. Open kit

6. Mask yourself and use hand gel.

7. Open drape using aseptic technique and place next to your patient.

8. Open gloves and drop your outside items on your sterile field (needle, cap, dressing and sterile saline)

9. Don sterile gloves

10. Assemble mediport needle, cap and saline and prime, place onto sterile field.

11. Holding the applicator downward, gently squeeze the wings to release 2% Chloraprep solution. Clean area of insertion with 2% Chloraprep applicator using a vigorous back and forth scrubbing motion for 30 seconds

**REMARKS**

Place mask on patient and care provider and anyone within 3 feet.

Implantable Port will be located under skin on upper half of chest medial upper arm, or lateral side of upper abdomen.

The drape will allow you to keep your saline sterile when accessing port

Be sure to prime off of your sterile field, a wet field is considered compromised. ONLY a Humber needle is to be used with the Implantable Port.
PROCEDURE

B. If using alcohol and Povidone: Clean area around catheter insertion with Povidone wipes starting at the catheter and moving outward in a circular manner taking care not to go back over area with wipe. Cleanse area that the transparent dressing will cover. Repeat with two Povidone wipes. Allow Povidone to dry. Clean portion of catheter to be looped under the dressing with the fourth Povidone wipe. Clean area with alcohol wipes in the same manner as above allowing area to dry.

12. Allow skin to air dry completely.

13. Palpate the mediport

14. At this time, may place Biopatch around Huber needle prior to accessing. Place sterile saline on sterile drape and, using a straight perpendicular motion, insert Huber needle into center of septum pushing through the skin and septum until the needle reaches the bottom of the portal chamber. If Biopatch not already placed, apply now. Pull back on syringe to check blood return and assure correct position in port.

15. Slowly inject 5-10ml Normal Saline to establish patency of the Implantable Port, and then clamp the Huber needle extension tubing.

16. Apply no sting barrier to the skin where the dressing is to be placed.

REMARKS

ONLY a Huber needle is to be used with the Implantable Port. Keep needle sterile. Injecting Normal Saline eliminates air in tubing.

Do not fan with hand or blow on site to prevent contamination.

Placement of your fingers on either side of the septum serves as guides and stabilized the Implantable Port.

If unable to access port with Biopatch, may place Biopatch on site after accessed place Biopatch shiny side up. Do not use on infants less than 1 week of age or gestation age less than 27 weeks. To prevent normal flora contamination of the port, a new sterile needle is required with each attempt.

Use only the clamp on the Huber needle extension tubing. When injecting the Normal Saline, if resistance is felt, try to withdraw some blood then try to flush again. No smaller than a 10ml syringe should be used in order to preserve port function.
**PROCEDURE**

17. Apply transparent occlusive dressing. May place 2x2 sterile gauze under Huber needle wings, but leave needle site visible.

18. Disconnect the syringe from the Huber tubing, and connect Heparin syringe and flush per policy, **PS 096, Heparin Flush**.

19. Date time and initial the dressing

20. Document procedure, supplies used and patient tolerance in the EMR. The licensed nurse is responsible for ongoing site assessment and documentation on the appropriate document.

21. When the Port is hep locked and in use for scheduled antibiotics or other meds, flush medication through with Normal Saline before flushing with Heparin.

22. Needle change to be done every 7 days or if needle malfunctions.

23. Cap change to be done every 7 days when heplocked or per policy **PS 564, Central Venous Catheters Surgically Placed and Temporary Venous Access**.

**REMARKS**

The dressing is to be changed weekly with the needle and prn. Use caution when dressing port site as adhesive dressing material may dislodge Huber needle during dressing change. (See section B)

Always clamp off Huber needle extension tubing with the clamp provided when connecting or disconnecting syringes or tubing.

This will prevent deposits from accumulating within the port chamber and resulting in port dysfunction.

**ORIGINAL DATE:** August 1986

**B. DRESSING CHANGE**

**PURPOSE:**

To apply a sterile dressing over Implantable Port site weekly and prn.

**PERFORMED BY:** RNs and LVNs with demonstrated and documented competencies.
EQUIPMENT:

1. Central Line Dressing Change Kit (use of kit is strongly encouraged) or 2% Chloraprep 3.0 ml applicator
   Do not use on newborn infants less than 27 weeks gestation and less than 1 week of chronological age.
2. Antimicrobial Patch
   Do not use on newborn infants less than 27 weeks gestation and less than 1 week of chronological age.
3. Transparent occlusive dressing
4. 2x2 Gauze (optional)
5. Gloves – sterile
6. 2 Masks

PROCEDURE

1. Remove old dressing from around Huber needle and dispose of properly. Transparent dressing to be changed weekly.
   Note condition of the patient’s skin and around the needle at this time. Nontransparent dressing to be changed daily.

2. Wash hands again, open items onto sterile field and apply sterile gloves. Place mask on patient and anyone within 3 feet of the patient.

3. Clean area around Huber needle insertion with 2% Chloraprep applicator using a vigorous back and forth scrubbing motion for 30 seconds.

4. If gauze dressing used, fold 2x2 gauze and place under bend of Huber needle to support the 90° angle. Antimicrobial patch may be used at insertion site. The edges of the radial slit must touch for optimal efficacy. Daily assessment of the site is done by palpation and assessing for redness.

5. Place transparent occlusive dressing over needle, making sure all edges are sealed against patient skin. Kerlix wrap may be used for patients highly sensitive to adhesive material or with impaired skin integrity.
PROCEDURE | REMARKS
---|---
6. Document dressing change and appearance of skin on appropriate documentation record. Notify physician of any redness, edema or pus formation at insertion site. Documentation regarding the date dressing was changed or future dressing change may be done per unit preference (i.e. directly on dressing vs. Kardex).

C. **BLOOD DRAW**

**PURPOSE:**

Due to limited venous access, patients who have an Implantable Port may have blood drawn from their port for laboratory studies, if the test cannot be done by finger stick.

**PERFORMED BY:** RNs and LVNs with documented competency

**EQUIPMENT:**

1. Needleless access cap (already in place, if heplocked or IVF infusing)
2. Two 10ml syringes
3. One 10ml pre-filled sterile non-bacteriostatic normal saline
4. Heparin flush per Heparin Policy [PS 096](#)
5. Gloves – non-sterile
6. Alcohol swabs
7. Lab tubes for specimen
8. Lab Requisitions

*NOTE:* Only a Huber needle is to be used with an Implantable Port

**PROCEDURE**

1. Check physician’s orders for what lab work is to be drawn.
2. If Mediport not accessed, follow steps 1 – 11 in part A of this policy.
3. Put on non-sterile gloves.
4. Open equipment using clean technique.
PROCEDURE

5. Clean injection cap with Chlorascrub wipe for 30 seconds and allow to dry for 30 seconds.

NOTE: If interrupting IV fluids that are on an infusion pump, turn pump OFF prior to clamping line.

6. If patient has IV fluids infusing, disconnect IV tubing at injection cap. Access injection cap with 10ml syringe.

7. Pull back on syringe and withdraw 5ml of patient’s blood, discard this syringe. Discard this specimen because it contains heparin and cannot be used for Lab. Do not re-infuse this blood to patient.

8. Attach appropriate size syringe for specimen needed, withdraw correct amount of blood.

9. Attach 10ml syringe with 10ml sterile non-bacteriostatic Normal Saline, unclamp Huber needle extension tubing, inject Normal Saline, clamp Huber needle extension tubing. The motion of clamping at the same time as pushing down on the barrel of the syringe ensures a positive pressure in the Implantable Port system. Put blood in appropriate tubes and label appropriately at the bedside using two patient identifiers. Keep end of Huber needle extension tubing clean at all times.

10. Attach syringe with 3ml Heparinized solution, inject into Implantable Port, and then clamp Huber needle extension tubing at the same time as you are injecting the last of the Heparin solution. The amount and concentration of heparinized solution is ordered per physician. (See Heparin Flush policy, PS 096.)

11. If IVF infusing reattach IV tubing after cleaning injection cap with Chlorascrub wipe for 30 seconds and allowing to dry for 30 seconds, and start infusion pump. Secure Huber needle tubing to chest with tape, and make sure IV tubing is then looped and taped to chest to prevent dislodgment of Huber needle.

REMARKS

If patient has 2 lumens with fluids infusing, all pumps should be turned off to ensure accurate lab values. Exercise caution if infusing inotropic agents.
D. DEACCESSING MEDIPORT NEEDLE:

<table>
<thead>
<tr>
<th>PROCEDURE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prepare patient for procedure.</td>
<td></td>
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<tr>
<td>2. Wash hands.</td>
<td></td>
</tr>
<tr>
<td>3. Apply a pair of clean gloves.</td>
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<tr>
<td>4. Remove old dressing from around Huber needle and dispose of properly. (Make sure to remove old dressing properly without activating safety-mechanism.)</td>
<td>Ensure Mediport has been flushed with appropriate amount of 100 units/ml Heparin per Heparin Policy PS.096 prior to removing needle.</td>
</tr>
<tr>
<td>5. Use 2 fingers of non-dominant hand to hold clear wings of port needle secure. Then, with dominant hand, bend black wings together and pull needle up at 90° to activate the safety device.</td>
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<tr>
<td>6. Discard needle into sharps container &amp; document de-access on appropriate patient medical record.</td>
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</tbody>
</table>

ORIGINAL DATE: September 1985 (Originally Medi-Port/Porta Cath)

REFERENCES:
