Mediport Training Booklet

A step-by-step guide to accessing, using, and de-accessing a mediport

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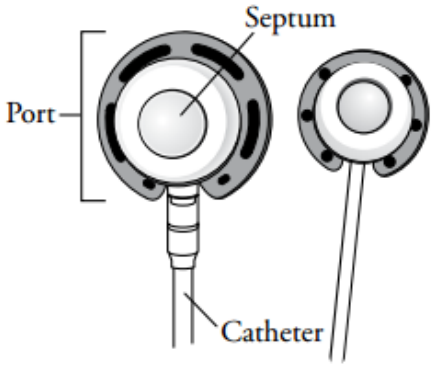
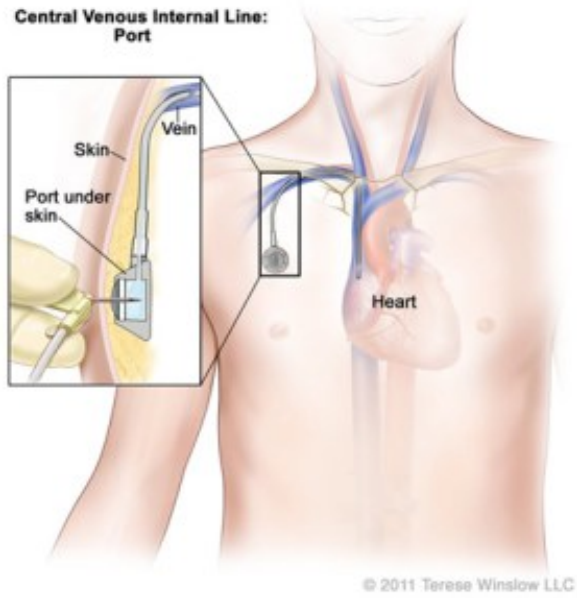
What is a central venous access device (mediport)?

A mediport is a device that is surgically implanted under the skin. The port is placed into the subcutaneous tissue under the skin and the catheter is connected to a large vein by the heart. The device consists of a catheter made of silicone or polyurethane that is attached to either a titanium or plastic reservoir. This is covered with a silicone rubber septum that is self-sealing.





What are the benefits of a mediport?

When mediports are compared to tunneled central venous catheters, mediports have a decreased risk of infection because the skin completely covers the device. Additionally, they do not require much maintenance, and do not conflict with clothing, playing, bathing, or even swimming. Because of the minimal interference with a person's activities, they are more accepted by children than tunneled central venous catheters. Because it is a central venous catheter, it can be used for long-term IV therapy.

What supplies are needed to access the mediport?

Before you begin setting up to access the port, the first thing you should do is check this list of supplies. You may not need everything on this list, but be sure everything that you need is out and ready before you begin:

_____ Medication to be injected into the port

_____ Antibacterial soap or hand cleanser

_____ Numbing cream IF needed

_____ Disposable waterproof pad

_____ One (1) ChloraPrep Applicator and two (2) alcohol square pads

_____ Two (2) 10cc (mL) syringes

_____ Clear dressing to cover port if keeping accessed

_____ Syringe or syringe(s) for factor

_____ Two (2) normal saline syringe flushes

_____ One (1) syringe of pre-filled heparin

_____ One (1) injection cap or needleless cap (microclave connector)

_____ One (1) Non-coring needle (Huber needle)

_____ One (1) Pair of sterile gloves

_____ Two (2) 2x2 gauze squares

_____ One (1) sharps container & one (1) trash container

_____ One (1) band-aid

Notes of caution:

- **Never use a syringe that is smaller than 5cc (mL). The increased pressure from a small syringe could break the port**
- **Always use a non-coring needle such as a Huber Needle, not a standard needle like those on a syringe. A standard needle can damage the port.**

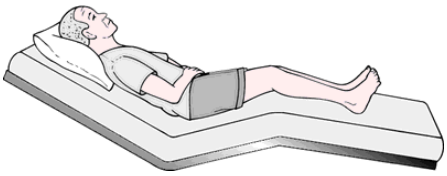
How should the mediport be accessed?

1. After gathering supplies, look at the skin that is over the port reservoir. If it is red or swollen, notify the provider and do not access.

2. If numbing cream is needed, apply this 30 minutes prior to the procedure.

3. Clean your work space with soap or alcohol and allow to dry. Then, cover with a disposable waterproof pad. The sterile field will be set up on this area.

4. Make sure patient is comfortable, either flat on their back or on their back with their head lifted partially up, at a 45 degree angle or less.



5. Wash hands either with antibacterial soap or hand sanitizer.

6. Feel the mediport with the finger tips. Locate the outer portion as well as the center of the port.

7. Open the sterile kit and put on the mask. The open end of the port kit should face the person who will be accessing the port. A sterile field can be created by opening the drape in the following order: top, left, right, then bottom. This keeps the sterile field from being contaminated.

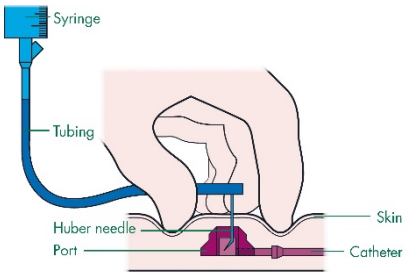
8. Keep field sterile while the 10 mL normal saline syringe, non-coring Huber needle, and needless injection cap is dropped into the field. Make sure that the normal saline syringe is not touching anything else in the sterile field.

9. Put on sterile gloves. Clean the site that will be accessed with a Chloroprep sponge applicator. Squeeze the wings of the applicator to release the cleaning solution. Press the applicator foam against the patient's skin to get the sponge wet. Once you can see the cleaning solution, use gentle back and forth strokes for about 30 seconds to prep a 3 inch by 3 inch area over the port. Allow the skin to air dry for 30 seconds.

10. Keeping gloves sterile, remove the end cap of the Huber needle and connect to the needleless injection cap, being sure to only touch the syringe with your dominant hand. Prime the tubing and needle with 1-2 mL of normal saline to ensure all air is out of the tubing. Clamp the tubing and leave the syringe attached to the tubing.

11. With the non-dominant hand, grasp the port with the thumb and the forefinger to ensure stability of the port.

12. Find the center of the port septum by feeling with fingers and insert the non-coring needle (Huber needle) firmly and at a 90 degree angle through the skin and septum of the port until the bottom of the port chamber is felt.



13. <u>Always</u> make sure that the needle is positioned correctly inside the mediport reservoir and the bottom of the port chamber is felt before starting an infusion.

14. Once the port chamber has been entered, do not rock or tilt the needle.

15. Unclamp the tubing, aspirate for blood return, and flush the remainder of the normal saline (5-10 mL as directed) to be sure that there is proper placement. Assess for saline coming out around the mediport to ensure it has not infiltrated. If there is no infiltration, clamp the tubing and disconnect the syringe, keeping cap sterile.
    a. If there is resistance with flushing, make sure the needle is placed correctly. The bottom of the port chamber can be felt with the tip of the non-coring needle tip if the needle is in the reservoir of the port.
    b. If resistance is still met and the position of the needle is confirmed, call the healthcare provider for further orders.
    c. <u>Never</u> inject normal saline forcefully. This could dislodge a clot or rupture the catheter.

d. If unable to get blood return and the system flushes without resistance, have the patient change position, raise arms, cough, deep breathe, and perform the Valsalva maneuver. This may change the position of the catheter. Notify the healthcare provider if unable to get blood return.

16. Connect syringe of mixed factor product to the needleless cap and unclamp tubing.

17. Infuse the factor as directed.

18. Once the infusion is complete, flush with 10 cc (mL) normal saline.

19. Follow with 2-3 mL heparin solution 10 units/mL or 100 units/mL as directed by provider.

20. If keeping port accessed, clamp the tubing and cover with transparent dressing.

21. If NOT keeping port accessed, it needs to be de-accessed.
    a. Keep gloves on and stabilize port reservoir with the non-dominant hand.
    b. Grip the needle with the dominant hand and pull with a smooth, upward motion.
    c. Activate safety needle device.
    d. Apply pressure to insertion site with gauze and secure with band-aid.