

Port Access & Dressing Change



An implanted venous access port (IVAP) provides continuous access to the venous system for blood sampling and administering IV fluids or medications. Clinicians must access, deaccess, and change dressings correctly for optimal patient outcomes.

Prior to accessing port:

- Place patient in a comfortable position and adjust the bed/chair for optimal access to IVAP. Ensure you are completing this procedure in a clean environment.
- Remove patient's gown/clothing to expose IVAP site
- Perform hand hygiene and don nonsterile gloves
- Assess for any signs and symptoms of complications, such as swelling in arms/fingers, dependent edema, shoulder pain, impaired circulation, fever, or pain/tenderness/redness at site.
- Check for equal bilateral circulation and sensation.
- Palpate skin overlying the IVAP to confirm it's intact, nontender. Ensure the IVAP does not move away from underlying fascia or the catheter is not kicked or coiled. If unsure if IVAP is in the correct spot, contact the treating clinician.

Port Access



• Preparing the site and supplies:

- Clip excess hair that covers the IVAP and surrounding area where the dressing will be placed.
- If dirt or hair is present on skin, wash skin with antimicrobial soap and water.
- Remove and discard gloves. Perform hand hygiene.
- Open necessary supplies while maintaining sterility.
- Put a mask on yourself and the patient.
- Don sterile gloves.
- Attach extension tubing and needleless end cap to noncoring needle while keeping the needle covered to maintain sterility.
- Prime needle and lumen of extension tubing using sterile saline flush. Clamp extension tubing.
- Clean IVAP site with antiseptic swab/wipe and scrub technique. Allow skin to dry per the manufacturing guidelines of the antiseptic.

• Accessing the port:

- With the nondominant hand, stabilize the IVAP with thumb and index finger on opposite sides of device.
- Grasp the wings/flanges of needle. At a 90° angle insert the needle into the center of septum using a smooth motion. Advance the needle gently until it hits resistance at the base of the reservoir or septum.
- Unclamp extension tubing.
- Aspirate for blood with the syringe.
- Flush tubing and needle with remaining flush.
- Check for leakage and/or infiltration.
- Clamp extension tubing and remove syringe.

Dressing Change

The noncoring needle should be changed every 7 days or per your facility protocol.

Method 1:

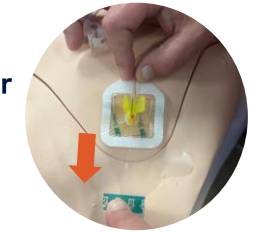
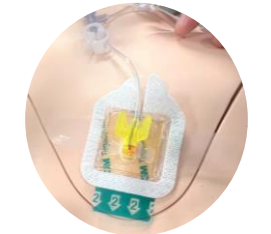
1. Open package of sterile dressing
2. Apply sterile gloves
3. Prepare port site per facility protocol.
4. Peel and remove top liner and discard. Leave protective sheath in place over needle.
5. Place needle into the base of the slit of dressing.
6. Wrap the dressing around the wings of the needle and access port per the directions on the previous page.
7. Ensure needle is positioned all the way to the base, apply dressing to skin, and remove liner in the direction it shows.
8. Use firm pressure to smooth down the CHG gel pad.
9. Apply tegaderm dressing on top of CHG gel pad.
10. Date, time, and initial dressing.

Method 2 (if the port has already been accessed):

1. Open package of sterile dressing
2. Apply sterile gloves
3. Peel and remove top liner and discard. Leave protective sheath in place over needle.
4. Use the tabs to slide CHG gel pad under the wings of the noncoring needle until the needle reaches the base of the slit.
5. Apply dressing to skin, and remove liner in the direction it shows.
6. Use firm pressure to smooth down the CHG gel pad.
7. Apply tegaderm dressing on top of CHG gel pad.
8. Date, time, and initial dressing.

Reminder: If the IVAP is heparin-locked, ensure you aspirate the heparin prior to use.

The noncoring needle must be on top of the CHG gel pad, otherwise, the CHG gel is not flush with the patient's skin and is ineffective. This is pictured here and incorrectly uses the CHG gel pad.



Port Deaccess

Deaccessing an IVAP involves removing the noncoring needle from the port after instilling a locking solution to maintain patency after infusions are complete. Deaccessing a port maintains patency and functionality between intermittent infusions. Before deaccess occurs, review the treating clinicians orders.

Prior to deaccessing port:

- Assess for any signs and symptoms of complications, such as swelling in arms/fingers, dependent edema, shoulder pain, impaired circulation, fever, or pain/tenderness/reddness at site. If any of these are present, contact provider.

To deaccess port:

1. Place patient in a comfortable position and adjust the bed/chair for optimal access to IVAP. Ensure you are completing this procedure in a clean environment.
2. Remove patient's gown/clothing to expose IVAP site
3. Perform hand hygiene and don nonsterile gloves
4. Ensure clamp on extension tubing is closed and any fluids have stopped infusing. Disconnect IV tubing from extension set.
5. Disinfect hub of extension tubing for a minimum of 15 seconds and allow to air-dry. Ensure the clamp is open, flush port with saline flush to clear any fluids or medications, and clamp tubing as the last 0.5mL is expelled from syringe.
6. Lock IVAP by instilling 5mL of heparinized saline or normal saline per your facility's practice.
7. Use the nondominant hand to stabilize the device. With the dominant hand, carefully loosen and remove the port dressing. When peeling the dressing away from the patient's skin, peeling toward the port instead of away from the port.
8. Stabilize the device again and with the dominant hand grasp the wings of the noncoring needle with thumb and forefinger.
9. Pull upward on the hub of the needle to remove it. Use adequate force to prevent recoil of the septum.
10. Engage the safety mechanism of the needle as it exits the patient's skin. Discard into a sharps container.
11. Blot the insertion site with sterile gauze. Leave open to air unless oozing occurs and a temporary bandage can be applied.

References:

Caple, C. (2023). Deaccessing implanted ports. *Dynamic Health*. <https://www.dynahealth.com/nursing-skills/deaccessing-implanted-ports/about>

Seeber-Combs, C. (2024). Accessing implanted venous access ports. *Dynamic Health*.

<https://www.dynahealth.com/nursing-skills/accessing-implanted-venous-access-ports/about>

3M Company (2020). 3M Tegaderm product guide. 3M Company.

<https://multimedia.3m.com/mws/media/1888499O/ttps-multimedia-3m-com-mws-media-587466o-tegaderm-chg-dressing-evaluation-of-gel-pad-dressing-pdf.pdf>