

Needling a Port

Central Venous Access Device (CVAD)

Equipment required

Alcohol hand gel or soap Detergent wipes Rubbish bin Large washable tray Sterile gloves Large dressing pack

Pre-prepared sterile saline syringes Medication Antiseptic swab pad Antiseptic swab sticks Paper/laundered towel Bungs and three way tap 10 mL sterile syringe

Port access needle Cavillon barrier wipe Occlusive Dressing

Key points

- 1. Scrub the skin with antiseptic swab sticks and allow to dry
- 2. Triangulate port with non dominant hand
- 3. Insert needle
- 4. Aspirate lock solution and discard
- 5. Saline flush using push, pause technique
- 6. Administer prescribed lock if required
- 7. Use a locking technique to prevent blood reflux

Start by

- Remove all jewellery/watches/false nails; short nails are preferable.
- Wear laundered clothes or apron.
- Roll up sleeves to the elbow.
- Have a rubbish bin handy so that all used items go directly into the bin.

Wash your hands

- Turn on the tap for warm water.
- Wet your hands and use enough soap to lather your hands and wrists.
- Wash every surface of your hands and wrists.
- Dry your hands with a clean paper towel, use the paper towel to turn off the tap.



Assess the site

Look and feel the site to ensure there is no signs of infection and safe to use. Signs of infection includes:

- Warmth.
- Redness.
- Swelling.
- Tenderness.
- Pus & discharge.

Prepare your child

- Feel for the port locating the outer perimeter
- Once located apply local anaesthetic cream on clean skin directly over
- the port 20 minutes (LMX[™]) to 1 hour (EMLA[™]) prior to needling
- Apply a transparent occlusive dressing over the cream
- Wash your hands
- After the 20-60 mins, position your child so that they are in a semi reclined position and are as comfortable as possible with pillows and blankets



- Explain to your child that once you have cleaned their skin it is really important they don't move and touch or cough on the clean skin, drapes and equipment. Face masks may be required for some children
- Offer your child something to comfort and engage them during the procedure. This can include their favourite toys, iPad or simply talking to your child
- Remove the local anaesthetic cream with a clean tissue or wipe, clean your hands and then feel for the outer perimeters of the port
- When you are confident with where the port is, finish with washing your hands

Prepare yourself and the equipment

- Wash or gel your hands
- Gather equipment and check packaging for damage and expiry date
- Clear and clean with detergent the area where you will be placing the large tray and sterile gloves. Clean inside the tray and allow to dry
- Wash or gel your hands
- Open your dressing pack and place on your clean space or washable tray
- Open up the dressing pack by the corners making sure you don't touch the inside of the pack





- Open your equipment on to the dressing pack making sure you don't touch any of the opened equipment, this is now your 'sterile field'
- Wash or gel your hands





Put on sterile gloves

Step 1

- Wash/gel hands, wrists and allow to dry
- Open the packet and unfold the contents to reveal the gloves without touching them

Step 2

 If you are right handed start with the right glove. Use your left hand to hold the cuff, while you slide your right hand in. Don't touch the outside of the gloves









Step 3

 Use your gloved hand to hold inside the cuff of the other glove while you slide your other hand in





Step 4

 Once both gloves are on you can now touch the outside of the gloves and make them fit

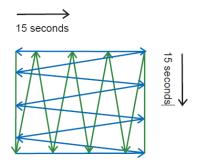


- Your gloved hands are now considered sterile, so touch only the bung and contents of the blue tray to limit contamination
- Prime the port needle, bung and three way tap with the sterile posiflush syringe
- No bubbles should be visible
- Gently tap the syringe on the sterile field, and/or manoeuvre the plunger to facilitate air removal
- Attach the 10mL syringe to the bung
- Place the clamp on

Cleaning the skin



- Using the chlorhexidine alcohol swab stick clean the skin in a cross stitch motion using friction by going back and forth from left to right and then with the reversed side of the chlorhexidine alcohol swab stick go up and down. You should cover an area 1-2 cm wider than the dressing site.
- Wait for the skin to dry, this may take a few minutes. Do not waft or blow on the area to hurry drying







• Place the sterile drape as pictured below to prevent your gloved hands getting contaminated by skin you haven't cleaned







Inserting the needle

- Hold the base of the port with your non dominant hand
- Stabilise the port with your thumb and first two fingers, triangulating the port to maintain stability when inserting the needle
- Hold the port needle with the white wings wrapped around your pointer finger and the syringe held in the same hand between your ring and little finger
- Aim for the centre of the port needling at a 90 degree angle
- Push firmly through the skin until the needle touches the base of the port

Aspirate and discard the lock solution from the port

- Pull back on the plunger of the syringe to withdraw previous lock solution (if used)(2mLs)
- For troubleshooting devices that do not bleed back please talk to your nurse or doctor about:
 - Checking external parts of device and clamp is off
 - Whether you have confidently hit the back of the port wall
 - The use of positioning/coughing
 - Instillation of saline
 - Contact details for staff that can assist you
- Disconnect syringe, and discard in bin

Give a good stop-start flush of saline

- Attach your first syringe containing normal saline and flush the port using a pulsatile technique (stop-start) to clear all blood from the line leaving a small amount of fluid in the syringe when you disconnect the syringe. Follow with the second syringe
- Leaving some fluid in the syringe, disconnect the saline syringe and then apply the clamp
- Residual fluid may remain on the bung, swab with another antiseptic swab pad











Apply the dressing

- Apply the barrier wipe to the skin covering the general area the dressing will cover
- Remove the backing from the dressing and drape the sticky side of the dressing over the insertion site, and once on smooth down the edges
- Secure the line using the additional, smaller dressing supplied in the pack by lifting up the line and placing under to catch the bottom perimeter of the first dressing







- Scrub the bung with an antiseptic swab pad, remove gloves and dispose of rubbish. Finish by washing hands
- Praise your child for the things that they did well during the procedure





Government of Western Australia Child and Adolescent Health Service

This document can be made available in alternative

formats on request for a person with a disability.

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