ACCESSING AN APHERESIS PORT

LOCAL CVAD PROCEDURE ©

To be read in conjunction with SCHN CVAD Practice Guideline Section 3.

Note: This is a highly specialised Port and requires permission to access the Port.

Staff are only allowed to access an Apheresis Port with prior approval by the Haematology service, have completed CVAD and IVAD accreditations and undergone specialised training as supervised by clinicians who are competent in the skill.

On insertion of the Port there will be an **Emergency Management Plan Alert** placed in the patient's eMR.

Equipment

- Gather equipment as per Surgical ANTT
- 1 x 10mL luer lock syringe (more if blood collection is required).
- 2 x pre-filled sodium chloride 0.9% syringe (or 10mL sodium chloride 0.9% ampoules and luer lock syringe with drawing up needle)
- 16G (must be 44mm-51mm length) IV cannula
- 3-way tap
- 1 x 2% chlorhexidine gluconate in 70% alcohol swab sticks.
- Semi-permeable transparent dressing
- Hyperfix tape

Procedure

Prior to procedure, discuss local anaesthetic options with patient:

- Topical local anaesthetic cream applied for recommended time OR

- Instillation of lignocaine 1% 0.9mL & Sodium Bicarbonate (8.4% injection - 1mmol/mL) 0.1mL resulting in a ratio of 9:1. Administer subcutaneously at planned cannula insertion site after cleaning.

- Explain the procedure and obtain verbal consent.

Prior to commencing set up, position patient for optimal visualisation, palpation and access of port site.

1. Set up as per SURGICAL ANTT
2. With 2% chlorhexidine in 70% alcohol swab stick clean around the Port site in a side to side scrubbing action to ensuring whole area to be covered with dressing is cleaned. If site is overly soiled, turn swab stick over and repeat for second side. Discard stick. If debris remains, repeat with a second stick. Allow to dry
3. Instill mixture of lignocaine 1% and Sodium Bicarbonate in location of planned cannulation site of Port. Apply pressure with sterile gauze.
4. Identify the Port reservoir under the skin by palpation with non-dominant hand and identify high point of funnel. Palpate and identify funnel and stabilise the reservoir securely between thumb and index finger (see Image 1 and 2)

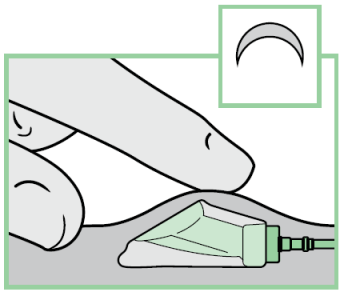


Image 1

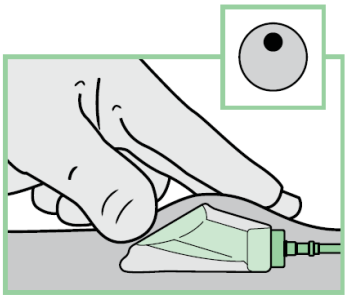


Image 2

5. Insert IV cannula at a shallow angle (approximately 30 degrees) into the centre of the Port funnel. Slide the needle to the stop at the centre of the funnel where resistance will be felt (see Image 3).

Image 3

6. Slightly retract needle (approximately 5mm) and continue advancement of IV cannula through internal valve (see Image 4 and 5).

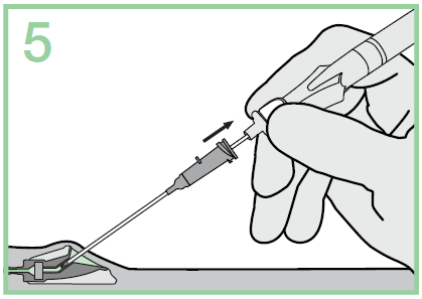


Image 4

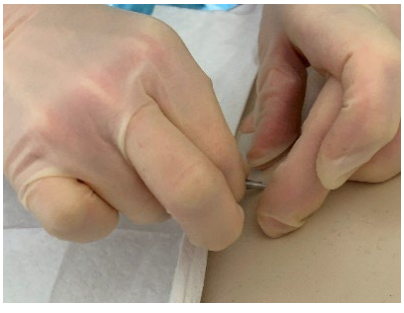
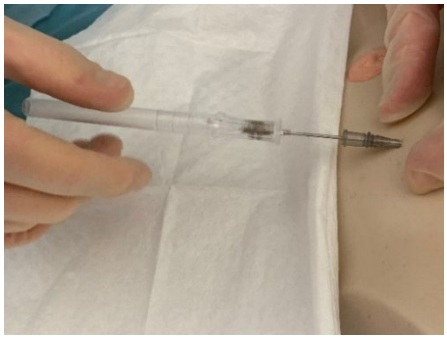


Image 5

7. Continue to advance IV cannula while withdrawing needle slightly until IV cannula hub is flush with skin (see Image 6).

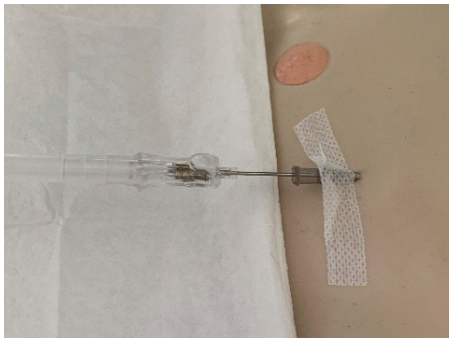
Image 6



Note: A minimum of 1.5cm of catheter advancement past the stop is required to ensure adequate passage through internal valve.

8. Place sterile cannula tape to the hub of the cannula to stabilise cannula (see Image 7).

Image 7



9. Once IV cannula is inserted, withdraw needle and immediately attach 3 way tap primed with 0.9% sodium chloride and 10mL syringe attached and withdraw 5mL blood for discard (see Image 8). Risk of air aspiration is reduced at this stage by encouraging the patient to perform a Valsalva manoeuvre or breath hold while removing the needle and attaching the 3-way tap.

Image 8

Practice Points:

It is good practice to always attempt to aspirate to reduce the risk of air embolism and discard the line lock.

Note: If resistance is encountered when attempting to obtain blood return from the Port, reposition the patient, ask them to cough, take a deep breath or raise their arms over their head.

If confident with IV cannula placement, consider attempting to flush with no more than 5mL of saline then re-attempt aspiration.

If unsuccessful, abandon procedure and refer to CVAD Occlusion Management Pathway and Section 4.2 in the CVAD Guideline.

10. If bloods are required, attach second 10mL luer lock syringe to 3-way tap and aspirate blood sample.

Practice Point:

Taurolock should be discarded when accessing a CVAD and should not be used for a blood culture sample. If a blood culture is taken from a CVAD locked with Taurolock, discard the lock (3mL) and THEN withdraw the blood culture sample.

11. Attach 10mL luer lock syringe with 10mL of sodium chloride 0.9% and flush using pulsating action and positive pressure lock the 3 way tap. Apply cap.
12. Place sterile transparent semi permeable dressing over site and secure IV cannula. Depending on the position of the cannula you may need to support the area under the hub with e.g. sterile foam or gauze to avoid kinking off of the cannula at the insertion site (see Image 9 and 10).

Practice Points:

Dressing can be applied earlier to secure IV cannula if patient is non-compliant

Image 9

Image 10

13. Remove gloves
14. Perform hand hygiene
15. Commence apheresis procedure
16. Discard waste in appropriate receptacles and return equipment to designated areas
17. Document in patient's medical record as per minimum documentation requirements in Section 1.6 in CVAD Guideline.

Revision History

Version (date)	Approved by	Amendment notes *(summary of what was changed)*
14th Nov 2023	PPG Committee	Due for mandatory review – no changes made.
10th July 2020	CVAD Working Group	Taurolock and blood culture collection practice point added (p3)
11th May 2020	PPG Committee	New document