LOCKING A CVC, PICC, MIDLINE WHEN NOT IN USE

LOCAL CVAD PROCEDURE ©

To be read in conjunction with the SCHN CVAD Practice Guideline Section 3.8

All lumens must be flushed and locked weekly when not in use.

Lock solutions, volumes and frequency

Choice of lock solution is at the discretion of the treating team. Consider consulting with the CNS2 Vascular Access for guidance.

Type	Minimum Recommended Lock Frequency	Volume of lock solution	0.9% sodium chloride^ *(less than 24hrs)*	Taurolock®* Taurolidine 1.35% + 4% citrate *(greater than 24hrs)*	Heparinised saline# 10units/mL *(greater than 24hrs)*
Non-tunnelled percutaneous CVC	CVC not in use up to 7 days	1mL per lumen	✓	X	✓
Midline	not in use up to 7 days	1mL per lumen	✓	X	✓
Tunnelled uncuffed CVC PICC	CVC not in use up to 7 days	1mL per lumen	✓	✓	✓
Tunnelled cuffed CVC	CVC not in use up to 7 days	2mL per lumen	✓	✓	✓
Port/IVAD	Port not in use up to 1 month	3mL	✓	✓	✓

Equipment list

- Gather equipment as per ANTT risk Assessment – Standard or Surgical
- Lock Solution + 10mL luer lock syringe (1 per lumen)
- 2 x 2% chlorhexidine gluconate in 70% alcohol (large) swabs
- 1x Prefilled sodium chloride 0.9% 10mL syringes. Alternatively use sodium chloride 0.9% ampoule, drawing up needle and 10mL syringe (1 per lumen)
- Needleless access device (NAD) (1 per lumen)

Procedure

> **Practice Point:** Explain the intended procedure to the patient/family/carer and obtain verbal consent.

1. Set up as per ANTT risk assessment –Standard/Surgical.
2. Draw up lock solution, (as per [Medication Administration guidelines]).
3. Prime NAD with sodium chloride 0.9% syringe and leave NAD attached
4. Stop infusion and ensure lines are clamped
5. Using 2% chlorhexidine gluconate in 70% alcohol swab vigorously clean the entire NAD *insitu* and hub of CVC for 20 seconds then allow to dry
6. Remove NAD and line and discard.
7. While holding the CVC in a downward position take a new 2% chlorhexidine gluconate in 70% alcohol swab and vigorously clean the outside of the hub for 20 seconds. Do not place the end of the 2% chlorhexidine gluconate in 70% alcohol swab into the open hub. Allow to dry.
8. Attach primed NAD and sodium chloride 0.9% syringe onto the hub of CVC
9. Unclamp and flush using a pulsating technique.
10. Remove syringe from NAD.
11. Instil lock solution using positive pressure lock technique whilst clamping lumen. Remove syringe.

> **Practice Point:**
>
> Positive pressure instillation of lock solutions is achieved by continuous flushing of the lock solution and clamping under pressure during instillation of last 0.5mL.
>
> The use of a pulsating technique will not create a positive pressure lock.

12. Complete process for 2nd lumen if required
13. Remove gloves and perform hand hygiene
14. Discard waste in appropriate receptacle and return equipment to designated areas
15. 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
11th May 2020	PPG Committee	No major practice changes for locking CVADs from v5 CVAD Guideline. Now presented in CVAD Local Procedure. Added taurolock as lock solution.