

Vascular Access Device Patient Pathway Guidance

Device-Related Infection Prevention Practice (DRIPP)



VAD assessment



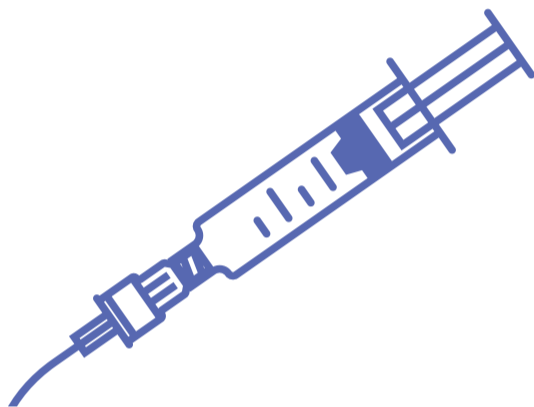
1. Assess need for device incorporating potential risk and vessel health and preservation^{1,2,3}
2. Select the most appropriate device with the fewest lumens needed for the prescribed treatment^{1,2}
3. Select smallest gauge catheter to minimise trauma^{1,3}

Insertion



1. Use ANTT (or other standardised aseptic technique)^{1,2,3}
2. Use maximal sterile barrier precautions for CVAD^{1,2,3}
3. Disinfect the skin with a single use application of 2% CHG* in 70% isopropyl alcohol and allow to dry^{1,2,3}
4. Sterile gel and sterile probe cover must be used for vascular access ultrasound procedures¹
5. Use sterile transparent semi-permeable adhesive dressing and document insertion^{1,2,3}

Administration of medicines



1. Use ANTT (or other standardised aseptic technique)^{1,2,3}
2. Decontaminate hub with 2% CHG in 70% isopropyl alcohol for 15 seconds and allow to dry^{2,3}
3. Designate a lumen for parenteral nutrition (PN) (lipids or non-lipids)²
4. Change administration sets
 - 96 hours for continuous infusion^{2,3}
 - 12 hours for blood or when complete or to infuse platelets^{2,3}
 - At completion of each bag of PN infusion^{2,3}
5. Flush with single use sterile sodium chloride 0.9% (or compatible solutions) before and after administration

On-going maintenance



1. Use ANTT (or other standardised aseptic technique)^{1,2,3}
2. Dressing to be changed every 7 days or sooner if compromised (e.g., loose, or wet)^{1,2,3}
3. Consider CHG dressing for CVAD as a strategy to reduce CRBSI²
4. Consider securement device to prevent complications³
5. Change needle-free connectors if the integrity of the device is compromised or according to manufacturer's guidance³
6. Follow manufacturer's guidance/local policy for flushing lumens not in frequent use^{1,3}

Daily assessment



1. Inspect insertion site for signs of infection and other complications at least each shift^{1,2,3}
2. Assess if the device is still required, if not remove²
3. Continue to observe the insertion site for signs of infection for 48 hours after removal¹
4. Document findings and actions^{1,3}

Removal of device



1. Re-site PIVC when clinically indicated and not routinely^{1,2,3}
2. Do not routinely remove and replace CVAD^{1,2,3}
3. Remove when no longer required, or not prescribed by treatment plan^{1,2,3}



- Healthcare practitioners (HCP) should have the skills and knowledge and be competent to carry out all vascular access procedures that they undertake^{1,2,3}
- Information and education should be provided for patients and carers^{1,2,3}

CHG – Chlorhexidine gluconate, PIVC – peripheral intravenous catheter, CVAD – central venous access device, CRBSI – catheter related bloodstream infection ANTT – Aseptic Non Touch Technique



*N.B. for patients with CHG sensitivity, alternatives should be determined locally

References

1. Gorski, L. A., Hadaway, L., Hagle, M., et al. (2021). Infusion therapy standards of practice. *Journal of Infusion Nursing*, 44(supl1)
2. Loveday, H.P., Wilson, J.A., Pratt, R.J., et al. (2014). Epic3: National Evidence-Based Guidelines for Preventing Healthcare-Associated Infections in NHS Hospitals. *Journal of Hospital Infection*. S86,ppS1-S70
3. Royal College of Nursing (RCN). (2016) Standards of Infusion therapy 4th Edition RCN. London