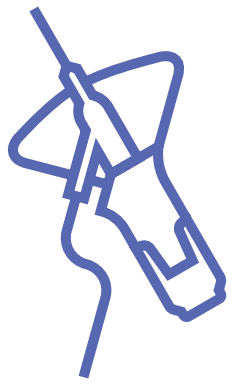
Vascular Access Device Patient Pathway Guidance

Device-Related Infection Prevention Practice (DRIPP)

VAD assessment

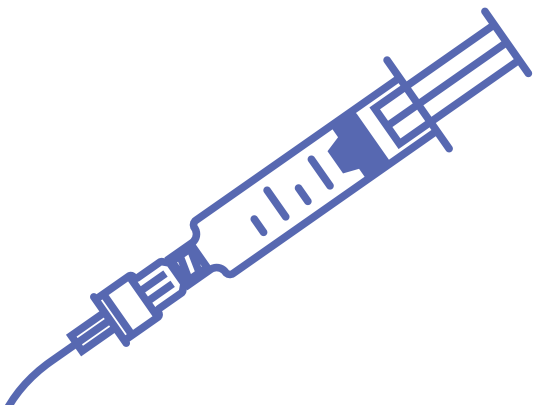
1. Assess need for device incorporating potential risk and vessel health and preservation[1,2,3]
2. Select the most appropriate device with the fewest lumens needed for the prescribed treatment[1,2]
3. Select smallest gauge catheter to minimise trauma[1,3]

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 procedures[1]
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 CRBSI[2]
4. Consider securement device to prevent complications[3]
5. Change needle-free connectors if the integrity of the device is compromised or according to manufacturer's guidance[3]
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 remove[2]
3. Continue to observe the insertion site for signs of infection for 48 hours after removal[1]
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

Scan for more information

*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

ASAP The Association for Safe Aseptic Practice

NIVAS National Infusion and Vascular Access Society

ips Infection Prevention Society

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