

Document Control

Title			
Management of a totally implanted vascular access device (Portacath) Standard Operating Procedure			
Author		Author's job title	
		Clinical Nurse Specialist Intravascular Fluid Management	
Directorate		Department	
Trustwide		Trustwide	
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0.2	Jan 2009	Draft	Amended version circulated for comments
0.3	Mar 2009	Draft	Further amended version circulated for final comments
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1.1	Nov 2010	Revision	Minor amendments including main contact details. Approved by Infection Prevention and Control Team 21 st April 2011.
1.2	Jun 2011	Revision	Minor amendments by Corporate Affairs to document control report and formatting for document map navigation.
1.3	Oct 2014	Revision	Confirmation of drawing up needles. References updated.
2.0	Oct 14	Final	Approved at IPCC 7th Oct 2014 & Published on Bob
2.1	Jan 2018	Revision	Transferred to latest template Section 5 clarification regarding gloves 6.5, 7.6, 8.6 & 9.3 Hand Hygiene technique added 6.6, 7.4, 8.7 & 9.4 ANTT included 6.12, 7.11, 9.9 & Appx A Addition of CLIP score tool
2.2	March 2018	Revision	Following consultation For approval at IPCC 27 th March 2018
3.0	April 2018	Final	Amendments to References following IPCC For posting on BOB
4.0	Dec 2019	Final	3.3 Minor changes to reflect specific role definitions for pre-registration nursing, midwifery and allied health professional students, in line with Nursing and Midwifery Council (NMC) requirements. Approved at IPDG meeting 17 th Dec 2019
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1. Background

- 1.1. This document sets out Northern Devon Healthcare NHS Trust's system for the management of a totally implanted vascular access device (TIVAD) eg Portacath and this procedure replaces all existing guidance/ superseded procedures.
- 1.2. A totally implanted vascular access device (Portacath) is a device inserted under the skin into the superior vena cava to provide repeated long term access through the skin via a non-coring needle.

2. Purpose

- 2.1. The Standard Operating Procedure (SOP) has been written to:
 - Identify the procedures for the management of a totally implanted vascular access device (Portacath).
 - Reduce the risks associated with having a totally implanted vascular access device (Portacath) by identifying evidence based safe systems of work.

3. Scope

- 3.1. This Standard Operating Procedure (SOP) relates to the following staff groups who may be expected to manage and maintain a totally implanted vascular access device (Portacath) and should be used in conjunction with standard operating procedures which refer to the administration of injectable medications:
 - Registered Nurses
 - Registered Midwives
 - Medical Staff
 - Operating Department Practitioners
- 3.2. Staff undertaking this task must be able to demonstrate attendance at relevant Trust training and be reassessed as competent as per NDHT Assessment and Maintenance of Clinical and Medical Device Competence in Nurses, Midwives, AHPs and Support Workers Policy.
- 3.3. Student healthcare practitioners may be given increased responsibility as they progress with their training, but must remain directly supervised by a competent Registrant at all times until registration, according to their professional body and standards; the supervising registrant will need to make themselves aware of the previous experience of the student, the stage of the course and assess current competencies.

4. Location

- 4.1. This Standard Operating Procedure can be implemented in all settings where competent staff are available to perform this skill and asepsis maintained.

5. Equipment

5.1. Equipment:

- 0.9% sodium chloride flushes (10mls)
- Ampoules of heparinised solution
- 10ml syringes (*smaller syringes will increase pressure exerted on veins and could damage the line*)
- Blunt fill and/or filter needles for drawing up
- Non coring needle (SafeStep safety port access)
- 2% chlorhexidine gluconate in 70% alcohol
- Sterile dressing pack
- Sterile transparent dressing with high moisture/vapour transmission rate e.g. IV3000
- Needlefree access device eg Codan Swanlock
- Sharps bin
- Protective eye/face wear if required
- Medications for administration
- Gloves

- 5.2. The use of non-sterile or sterile gloves will depend on the procedure being undertaken and its technical difficulty, contact with susceptible sites or clinical devices and the risks involved, including the risk of exposure of the health care worker to blood and / or body fluids (RCN 2016).

- 5.3. Heparinised solution should be considered for maintenance of a Totally Implanted Vascular Access Device, but should not be used routinely if the patient is to receive a course of treatment via this device. In all situations this should be discussed with medical staff and prescribed. If heparinised flush is indicated this should be administered after the final 0.9% sodium chloride flush and again administered under positive pressure.

6. Procedure for administering medications through a Portacath

- 6.1. Explain the procedure to the patient checking patient identity against relevant prescription documents, check allergy status and gain informed consent.
- 6.2. Prepare equipment as required from list in section 5. Prepare the medications prescribed as per the relevant standard operating procedures and 0.9% sodium chloride flushes. You will need enough flushes to flush the line pre administration of medications, between each medication and to flush on completion of administration.
- 6.3. Position the patient appropriately, ensuring they are comfortable, with line exposed respecting individuals privacy and dignity as necessary.
- 6.4. Consider the use of protective eye / face wear and aprons if there is an increased risk of splash inoculation (e.g. unpredictable patients).
- 6.5. Wash hands using an effective Hand Hygiene (HH) technique and apply gloves.
- 6.6. Use aseptic non-touch technique (ANTT) at all times.
- 6.7. Thoroughly disinfect needlefree access device with 2% chlorhexidine gluconate in 70% alcohol and allow to air dry. This should be repeated for each lumen.
- 6.8. If the line is not in constant use, attach an empty syringe, release clamp and attempt to aspirate 5mls blood to verify position. This is not always possible but attempts should be made to verify position of the catheter. This should be repeated for each lumen if relevant. If you are unable to confirm position you should flush cautiously. If you have any concerns the line is not patent then further advice should be sought.
- 6.9. Flush the line under constant pressure and then administer any medications as per prescription flushing between each medication.
- 6.10. If the flush is a maintenance flush or upon completion of medication administration the final flush should be done utilising a brisk push pause technique (1ml/time) and clamped under positive pressure i.e. before syringe is removed from needle free device. This should be done for each lumen if appropriate.
- 6.11. Dispose of all sharps and consumables immediately at point of treatment according to NDHT Waste Management Policy.
- 6.12. Document the process within the patient notes including a record of the CLIP score.
- 6.13. Lines not being routinely used should be flushed monthly.

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- 6.14.** When needle-free access devices are replaced the end of the line should be cleaned with 2% chlorhexidine gluconate in 70% alcohol.
- 6.15.** Monthly maintenance flushes should be done with 0.9% sodium chloride and locked with heparinised solution. The totally implanted vascular access device will need to be accessed using a non-coring needle (see separate section).
- 6.16.** Advice should be sought if:
- There is a history of difficulty with this procedure
 - You are unsure of the catheter position
 - You observe any signs of infection, phlebitis or infiltration
 - You are concerned that the line has occluded

7. Procedure for dressing a Portacath

- 7.1.** Between treatments when no needle access to the device is required a dressing may not be indicated and this should be reviewed on an individual basis.
- 7.2.** Change dressing every 7 days or sooner if contaminated.
- 7.3.** Explain the procedure to the patient checking patient identity and gain informed consent.
- 7.4.** Using the principles of Aseptic Non Touch Technique (ANTT) prepare the equipment prepare the equipment as required from list in section 5.
- 7.5.** Put on gloves and loosen the dressing, removing it without touching the catheter and exit site - lifting from the base of dressing upwards reduces the risk of dislodging the catheter.
- 7.6.** Wash hands using an effective Hand Hygiene (HH) technique and apply sterile gloves.
- 7.7.** Thoroughly disinfect entry site with 2% chlorhexidine gluconate in 70% alcohol for at least 30 seconds and allow to air dry.
- 7.8.** Place new dressing over site.
- 7.9.** Replace needlefree access devices.
- 7.10.** Dispose of all sharps and consumables immediately at point of treatment according to NDHT Waste Management Policy.
- 7.11.** Document the process within the patient notes including the CLIP score.
- 7.12.** Advice should be sought if:
- There is a history of difficulty with this procedure
 - You are unsure of the catheter position
 - You observe any signs of infection, phlebitis or infiltration
 - You are concerned that the line has occluded

8. Procedure for Accessing a Portacath

- 8.1.** Consider use of topical anaesthetic.
- 8.2.** Consider topical antibiotics.
- 8.3.** Consider the use of protective eye / face wear if there is an increased risk of splash inoculation (e.g. unpredictable patients).
- 8.4.** Explain the procedure to the patient checking patient identity against relevant prescription documents and gain informed consent.
- 8.5.** Position the patient appropriately, ensuring they are comfortable, with site exposed respecting individuals privacy and dignity as necessary.
- 8.6.** Wash hands using an effective Hand Hygiene (HH) technique and prepare equipment as required from list in section 5.
- 8.7.** Use aseptic non-touch technique (ANTT) at all times.
- 8.8.** Through palpation locate site of the port identifying the septum assessing the depth of the port and thickness of the skin.
- 8.9.** Select appropriate size and type of needle to access according to treatments of maintenance regime.
- 8.10.** Thoroughly disinfect skin over septum using 2% chlorhexidine gluconate in 70% alcohol for at least 30 seconds and allow to air dry.
- 8.11.** Holding the access needle in the dominant hand, stabilise the port with thumb and forefinger of non-dominant hand.
- 8.12.** Inform patient of your actions upon accessing.
- 8.13.** Insert the needle under pressure perpendicular to port through skin into the septum until the rear plate of the hub is felt.
- 8.14.** Using an empty syringe draw back in an attempt to confirm position.
- 8.15.** Flush with 5ml – 10ml 0.9% sodium chloride slowly observing for any pain or swelling.
- 8.16.** Administer any drugs as prescribed considering the standard operating procedures on injectable medicines.
- 8.17.** Flush with 10ml 0.9% sodium chloride.
- 8.18.** Finally flush with 5ml heparinised solution using push pause technique and clamp the line ensuring pressure is maintained.
- 8.19.** If the needle is to remain in situ cover with a sterile dressing.

8.20. Dispose of all sharps and consumables immediately at point of treatment according to NDHT Waste Management Policy.

8.21. Document the process within the patient notes.

9. Procedure for Removal of SafeStep safety port access needle

9.1. This needle can be removed in all settings providing asepsis is maintained.

9.2. Explain the procedure to the patient checking patient as per local policy and gain informed consent.

9.3. Wash hands using an effective Hand Hygiene (HH) technique and prepare equipment as required from list in section 5.

9.4. Use aseptic non-touch technique (ANTT) at all times.

9.5. Remove dressing carefully – lifting from the base of the dressing upwards reducing the risk of dislodging the accessed port.

9.6. Remove needle by securing the port between thumb and forefinger and gently pulling the device until the needle is completely removed from the patient applying pressure to the puncture site. The safety mechanism covers the needle point and locks it into the plastic base.

9.7. Apply sterile dressing to site as appropriate and review after 24 hours.

9.8. Dispose of all sharps and consumables immediately at point of treatment according to NDHT Waste Management Policy.

9.9. Document the process within the patient notes including CLIP score and any signs of potential complications upon removal.

9.10. Advice should be sought if:

- There is a history of difficulty with this procedure
- You are unsure of the catheter position
- You observe any signs of infection, phlebitis or infiltration
- You are concerned that the line has occluded

10. References

- Loveday H. P. et al (2013) National Evidence Based Guidelines for preventing Healthcare Associated Infections in NHS Hospitals in England (epic 3)
http://www.his.org.uk/files/3113/8693/4808/epic3_National_Evidence-Based_Guidelines_for_Preventing_HCAI_in_NHSE.pdf
- NHS Improvement High Impact Interventions
https://www.ips.uk.net/files/6115/0944/9537/High_Impact_Interventions.pdf
- Nicol M, Bavin C, Cronin P, Rawlings-Anderson K, Cole E. and Hunter J. (2012) Essential Nursing Skills 4th Edition. Mosby, London.
- The Royal Marsden Manual of Clinical Nursing Procedures
www.rmmonline.co.uk/

11. Associated Documentation

11.1. Northern Devon Healthcare NHS Trust Policies for :

- Aseptic Techniques Policy
- Assessment and Maintenance of Clinical and Medical Device Competence in Nurses, Midwives, AHPs and Support Workers Policy
- Injectable Medicines Policy
- Intravascular Devices Policy
- Standard Infection Control Precautions Policy
- Waste Management Policy

11.2. Northern Devon Healthcare NHS Trust Standard Operating Procedures SOPs:

- Administering Injectable Medicines
- Blood Samples from Central Venous Catheters
- Preparing Injectable Medicines

APPENDIX A

CLIPS (Central Line Infection Prevention Score)

