

ACCESS DIALYSIS CATHETER HOOK UP

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1.0 INTRODUCTION

This procedure should be performed using 2 members of staff. However, the procedure can be performed using one person, which involves using a **sterile technique** with no assistant. The procedure must obey the strict rule of aspirating a locked catheter before it is flushed and used for blood access. The procedure is applicable to single or double lumen, temporary or tunnelled catheters of any type.

2.0 AIM / OBJECTIVE

The aim of this policy is to give all staff who works at SaTH affiliated Renal Units clear instruction on the procedure for disconnecting a patient from dialysis via a Dialysis Central Venous Catheter.

3.0 OBJECTIVES

The objectives of this policy are to ensure all staff are trained to follow the same aseptic procedure and use the same method in order to minimise risk of infection and maintain patient safety.

4.0 DEFINITIONS USED

CVC – Central Venous Catheter – tunnelled, temporary or femoral line

BFR – Blood flow rate

PPE – Personal protective equipment

A – Refers to arterial side of line or circuit

V – Refers to venous side of line or circuit

5.0 SPECIFIC DETAIL

Equipment and disposables:

PPE – apron, gloves, visor.

Clean trolley

Neckline pack

Sterile glove

0.9% sodium chloride 20ml x 1

2% Chlorhexidine in 70% Isopropyl alcohol (Sani-Cloths) x 4

Detergent Wipes

Prescription chart

1. Ensure machine checks are completed and documented on daily worksheet. 0.9% Sodium Chloride, Heparin/Tinzaparin to be counter checked. If heparin, draw up and attach to dialysis circuit.
2. Check dialysis prescription chart and patients ID. Explain procedure to the patient and document their observations.
3. Check patient's dialysis CVC dressing, if redressing is required, change pre dialysis as per protocol. Record VIP score.
4. Clean sterile trolley with detergent wipe. Decontaminate hands.
5. Open neckline pack onto sterile trolley. Decontaminate Hands. Place your hand in yellow bag and arrange contents of the plastic tray onto your sterile field. Open disposables onto sterile field. Check 20ml 0.9% sodium chloride and obtain counter check (if not previous checked)- place on side of sterile trolley.
6. Position 'A' and 'V' clamps 3-4cms away from connections on dialysis circuit lines. Stop the dialysis pump, clamp lines and connect the 'A' and 'V' lines together with a sterile adaptor. Wipe each connection with Sani Cloth prior to commencing procedure.
7. Remove gauze from dialysis catheter.
8. Decontaminate hands. Open blue waterproof towel and place under the dialysis catheter.
9. Using a Sani-Cloth clean the whole length of the 'A' limb of catheter using a twisting / friction motion and discard.
10. Repeat process for 'V' limb of dialysis catheter.
11. Open sterile gloves onto bottom of trolley or clean patient table. Decontaminate hands and put on.
12. Draw up 2 x 10mls syringes of 0.9% Sodium Chloride, then discard needle into sharps bin. Open two Sanicloths into plastic tray.

13. Using a pair of tweezers lift the dialysis catheter up and insert a white sterile towel under the catheter.
14. Remove and discard obturator on 'A' limb with a piece of gauze. Use one Sani-Cloth to clean the now exposed end of the limb (hub) in a twisting but downward motion, **whilst securing the top end of the limb with the other end of the Sani-Cloth.**
15. Discard Sani-Cloth and attach a 5ml syringe. (Leave in-situ without aspirating for now)
16. Repeat process for 'V' Limb.
17. Aspirate 5mls of blood from the 'A' limb and discard.
18. If blood sampling is required, attach the appropriate size syringe and aspirate required amount (refer to blood sampling protocol).
19. Flush with the prepared 10mls of 0.9% sodium chloride. Hold the syringe vertically and flush in firmly then clamp leaving syringe in place.
20. Repeat process for 'V' limb.
21. Once the aspiration and flush procedure is complete, use 2 pieces of gauze to hold each end of the joined extracorporeal 'A' and 'V' circuit line, disconnect from adaptor and connect to 'A' and 'V' limbs of the patient's catheter.

(NOTE: *The sterile gloves should never come into contact with the line therefore remaining sterile. When attaching the line to the catheter limb the gauze should be kept away from the male/female connector and a 'non touch' technique employed for the actual contact. The connection should then be tightened gently by the sterile gloved fingers.***)**

22. Commence straight hook up with BFR 100ml/min, operating the dialysis machine with sterile gauze to keep the gloves sterile. The pump will stop and alarm when the blood reaches the venous bubble trap. Increase pump speed slowly to patients prescribed BFR

FULL BLEED OUT ONLY WHEN AGREED BY BAND 6 SISTER.

(NOTE: *If a patient is deemed to need a full bleed out for i.e. - gross fluid overload, connect the 'A' circuit line to the catheter and the 'V' to a priming bag and commence bleed out at a BFR of 100ml/min. The pump will stop and alarm when the blood reaches the venous bubble trap. Clamp 'V' line and priming bag, disconnect from priming bag and connect to "V" limb of catheter, increasing pump speed slowly to patients prescribed BFR.***)**

23. It is the responsibility of the 'clean' nurse to correctly dispose of waste and sharps.
24. Decontaminate hands. Wipe down trolley with detergent wipe. The nurse is now free to continue completing the daily worksheet/checks. Any drugs administered to be signed for (including saline and heparin/Tinzaparin).
25. Do not leave the patient until daily dialysis chart is fully completed, nurse call bell accessible and the patient is comfortable.

2.0 TRAINING

New staffs to complete training pack and be assessed & signed off as competent before carrying out this procedure on their own.
Staff competency to be re-evaluated yearly by an infection control link on the Renal Unit.

3.0 AUDIT

Monthly ongoing dialysis catheter care audit.
Root cause analysis on any MRSA/MSSA bacteraemias.
Monthly hand hygiene audit.
Bi annual PPE audit.

8.0 REFERENCES

Nice Guidelines 2009
The Renal Association Guidelines 2015
EPIC Guidelines 2008

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