### The Shrewsbury and Telford Hospitals NHS Trust Renal Unit for Shropshire and Mid-Wales

## ACCESS DIALYSIS CATHETER TAKE OFF ONE PERSON PROCEDURE

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Department: Renal Services SaTH

Directorate: Medicine Hospital Site: SaTH

Keywords: Dialysis Access, Central venous catheter, Hook up, One

person procedure

Comments:

### 1.0 INTRODUCTION

This involves the Renal Unit "One Nurse I/V Technique" of using a clean nurse and sterile trolley with no assistant. This procedure is applicable to single or double lumen, temporary or tunnelled catheters of any type. This procedure obeys the strict rule of flushing and locking with citralock any used/unused central venous catheter.

#### 2.0 AIM / OBJECTIVE

The aim of this policy is to give all staff who work 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 gloves x 2

0.9% sodium chloride 20ml x 1

2% Chlorhexadine in 70% Isopropyl alcohol (Sani-Cloths) x 5

**Detergent Wipes** 

Citra-lock (Trisodium Citrate 30%)

Micropore tape

Prescription chart

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- Explain procedure to patient. Check prescription chart and obtain counter check for 0.9% sodium chloride and appropriate locking solution (Citralock 30%)
- Clean sterile trolley with detergent wipe. Decontaminate hands.
- Open line 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. Open 3 Sani-Cloths into plastic tray. Check 20ml 0.9% sodium chloride and Citralock and obtain counter check - place on side of sterile trolley.
- Position A and V line clamps close to the connections (approx 3-4cms away) on circuit lines.
- Decontaminate hands. Open blue waterproof towel and split and place under the dialysis catheter.
- Open a 4<sup>th</sup> sani-cloth and wipe both 'A' line & limb clamps and then above, below and around the connection and discard & a 5<sup>th</sup> sani cloth for the V limb.
- If washing back using 0.9% sodium chloride use an extra sani-cloth to wipe end of giving set/connector and leave to dry.
- Open sterile gloves onto bottom of trolley or clean patient table. Decontaminate hands and put gloves on. Draw up 0.9% sodium chloride and appropriate volume of citralock.
- With tweezers lift lines and insert white sterile paper towel under catheter.
- Stop pump, select/ press reinfusion with gauze. Clamp 'A' line above and below connector and disconnect. Cover the end of detached line with gauze and hold in hand or give it to the patient to hold.
- With the first of the 3 opened Sani-Cloths on the sterile trolley, wipe the end of the 'A' catheter limb (catheter hub).
- Attach the 10ml syringe of 0.9% sodium chloride to 'A' lumen. **NB: There should be no aspiration before flushing.** Hold the syringe vertically and flush firmly.

## FOR ONLINE WASHBACK (4008 Dialysis Machines)

- (Wipe end of red port on re-infusion line with Sani-cloth before putting on sterile gloves.)
- Remove obturator from red port on re-infusion line with gauze and wipe end with 2nd sani-cloth (off sterile field).
- Attach arterial line from patient to the red port on re-infusion line. This is now a closed circuit and on-line wash-back can commence at 150ml/min.
- If conductivity low or can is empty revert back to 0.9% sodium chloride wash back.

## FOR ONLINE WASHBACK (5008 Dialysis Machines)

- (Preferable to have clean nurse assisting with commencing re-infusion)
- 14. At end of treatment when treatment goal achieved. Select start for reinfusion (washback)
- 15.Connect the safeline to the arterial line
- 16 Select ok and reinfuse (washback) at 150mls/min.
- If conductivity low or empty revert back to 0.9% sodium chloride wash back.

## FOR 0.9% SODIUM CHLORIDE WASHBACK (Nikisso AFB)

- With a piece of gauze pick up the end of the giving set attached to 500mls 0.9% sodium chloride and attach it to the arterial line. This is now a closed circuit and wash-back can commence at 150ml/min.
- Once reinfusion has started Your GLOVES ARE NOW NOT STERILE, as you wash-back turn the dialyser to increase dialyser clearance.
- On completion of wash-back remove gloves, decontaminate hands and put on 2<sup>nd</sup> pair of sterile gloves.
  - Clamp V limb and V line and disconnect. Ask patient to hold the discarded line covered with gauze or leave in an appropriate place.
- Clean the hub of 'V' limb with a sani cloth and then flush with the prepared 10mls 0.9% sodium chloride exactly as procedure for 'A' limb.
  - Lock both catheter lumens with **Citralock**. Go to Citralock policy for full details but to emphasise the main points: –
- Always use the exact volume as shown on each limb of the CVC line.
- The volume of Citralock must be documented on the dialysis prescription chart. Ensure drug chart is signed and counter signed post procedure.
- Citralock should be injected into each catheter lumen over 8 10 seconds. (see citralock unit policy). Then attach obturators.

Wrap the ends of the catheter in a piece of gauze, folding the bottom end up to cover the obturators.

This should now be secured with two pieces of micropore WITH THE OUTER END FOLDED OVER. It should be secure but not tight and needs to be easily removed next session.

Sterile trolley should be thoroughly cleaned with detergent wipe.

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## For Emergency Washback Only

Emergency should be defined as when a patient has become very unstable on dialysis e.g

Severe Chest Pain

Loss of Consciousness

Cardiac Arrest

# This does not include a patient dropping there blood pressure which can be stabilised by giving fluid and lying flat.

Clamp A limb on dialysis catheter patient line and A line of circuit and commence instant wash-back with saline attached to arterial port on circuit. BFR may be 150 – 300 depending on condition of patient.

# DO NOT REMOVE CLAMP. Do not washback the small section of blood in the A line to the patient.

This contains approximately 20mls of blood which can be wasted in an emergency.

Observations should be rechecked before disconnecting patient as they may require more IV fluids to stabilise.

This should be performed or agreed by a qualified nurse.

Before flushing A limb draw back 5 mls blood and discard (in case of clots) then flush as per policy.

## **6.0 TRAINING**

New staff 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.

#### **7.0 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 2011
NKF
EPIC Guidelines 2008

Reviewed and amended to reflect current practice 11/08/2017 by:

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