

USE OF ACTILYSE IN VASCATHS

Bottomline

“Catheters and ports are essential tools for providing urgent and in some cases, long term vascular access” (KDOQI, 2006). Early intervention of dysfunctional catheters with thrombolytics have been proven to be highly effective in opening partially and fully occluded lumens which in turn greatly reduces morbidity and mortality. (KDOQI, 2006). Actilyse is a thrombolytic agent which converts plasminogen to plasmin.

Expected Outcome:

- By administering an intra-catheter thrombolytic infusion of actilyse, the catheter should be de-clotted and patency restored to the tunnelled vascath

Limitation for Practice:

- RN completed REM Chronic haemodialysis competency

Equipment Required

- Dressing trolley
- Protective gown and face shield
- Actilyse 10mg and 10ml of Water for Injection
- Drawing up needle
- Dressing pack
- Sterile gloves
- 1 or 2 x 3ml syringes
- 1 x packet of gauze
- 1 or 2 x luer lock catheter bungs
- Betadine solution
- Blue sheet

Procedure

1. Obtain an order on the once only section of the medication chart from the registrar to de-clot the vascath with Actilyse. If dialysis has commenced, the patient must be disconnected and where possible the blood should be returned.
2. Don gown and face shield or mask.
3. Wash hands and prepare sterile field with all equipment and fluid required.
4. Place blue sheet under patient's vascath lumens.
5. Don unsterile gloves.
6. Using the yellow forceps, soak 2-4 pieces of gauze in the Betadine solution. Wrap and rub in the Betadine gauze around the arterial and venous ends of the vascath and around each clamp. Leave to soak for a minimum of 3 minutes. Position trolley in close proximity to the patient.
7. Perform a 3 minute hand wash with antimicrobial hand wash and don sterile gloves.

St George Hospital Renal Department: INTERNAL ONLY

8. Using dressing pack and aseptic technique, prepare the Actilyse for administration. Mix 10mg Actilyse vial with 10ml of water for injection. If there is poor flow from only one lumen, use a 3ml syringe to draw up the volume of that lumen (volume will be printed on the lumens clamp). If there is poor flow from both lumens, use 2 x 3ml syringes and draw up the volume for each catheter lumen (i.e. 1.9mls and 2.0mls).
9. Unfold the sterile towel on the dressing field and leave it within reach.
10. Using a non touch technique, lift the vascath lumens with one blue forcep and then use the 2nd forcep to remove the betadine soaked gauze from the lumens. Discard the 2nd forcep. Place the sterile towel on the patient's chest, then place vascath lumens onto the sterile towel and discard the remaining forcep.
11. Hold the affected lumen with sterile gauze and with the other hand using another piece of sterile gauze, remove and discard the cap from the lumen.
12. If there is poor flow from only one lumen, attach a 3mL syringe and instil appropriate volume of Actilyse into the affected lumen. If there is poor flow from both lumens, use 2 x 3ml syringes and instil appropriate volume of Actilyse into each catheter lumen (i.e. 1.9mls and 2.0mls).
13. 14. Leave Actilyse indwelling for 30 minutes.
14. After 30 minutes, withdraw and discard the Actilyse and flush lumen/lumens with 10mls of NaCl. Assess lumen patency.
15. If adequate flow, commence or recommence dialysis.
16. If flow remains unchanged, contact the Vascular access nurse and renal registrar; the patient may need to attend a vascathagram.
17. Document the procedure and outcome in the patients Haemodialysis flow sheet, RISC and Vascular access history.

References:

- MIMS Online
- Actilyse consumer medicine information
- NKF K/DOQI (2006):
<http://www.kidney.org/professionals/KDOQI/guidelines>.
- Tordoir, J, Canaud, B, Hagge, P, etc, *Nephrology Dialysis Transplantation* (2007), European Best Practice Guidelines on vascular access, 22, [suppl 2]: ii88-ii117.