THE ROYAL WOLVERHAMPTON NHS TRUST Specialist Clinical Practice Renal Sub-committee

Practice Reference: SNCP09

Title: Obtaining a blood specimen from haemodialysis

blood lines.

Date of Implementation: October 2009

Version: 2

Review dates: March 15

Date of Next review: March 18

Author: Renal Advanced Nurse Practitioner

Practice Location: Renal Specialist clinical Practice Folder/ Trust

Intranet

1.0 Practice Statement:

- 1.1 To prevent infection and ensure client safety when obtaining blood specimens for analysis directly from haemodialysis lines.
- 1.2 To be undertaken by a registered nurse with a renal qualification, or an RN with training from a renal nurse who has been assessed and has evidence of competence.

2.0 Equipment:

- Syringe or appropriate blood bottles and adaptor
- Sharps Box
- Personal Protective Equipment (PPE) Plastic apron, Visor, non-sterile gloves.
- 1 x 21g self-sheathing needle
- 70% alcohol 2% Chlorhexidene gluconate medical devices wipe

3.0 Detailed Action:

- 3.1 Provide patient with explanation of procedure.
- 3.2 Wash hands with soap and water and dry thoroughly
- 3.3 Apply PPE.
- 3.4 Swab arterial injection port on dialysis blood line with a chlorhexidine wipe and allow to dry for 30 seconds

3.5 Connect needle to appropriate syringe or blood bottle using adaptor. Insert needle into arterial injection port and withdraw plunger to obtain sample(s).

Note (If multiple samples are required disconnect and reconnect blood bottles via the adaptor leaving the needle in situ in the injection port until all samples are obtained) – using ANTT

- 3.6 If a sample is being taken for dialysis adequacy at the end of dialysis the 'slow flow method' must be utilised (see Appendix 1)
- 3.7 Disconnect final blood bottle, remove needle from injection port and discard in sharps box.
- 3.8 Label all blood bottles at the bedside.
- 3.9 Dispose of relevant equipment in appropriate waste bag.
- 3.10 Remove PPE.
- 3.11 Wash hands with soap and water and dry thoroughly.

4.0 Financial Risk Assessment

4.1 Following a Risk assessment of this clinical practice no financial risks have been identified.

5.0 Equality and Diversity Risk Assessment

5.1 Following an Equality and Diversity risk assessment of this clinical practice, no equality and diversity risks have been identified.

6.0 Maintenance

6.1 This clinical Practice will be reviewed and kept up to date by the Renal ANP and the Specialist Clinical Practice Renal Sub- Committee workgroup will recommend changes and amendments.

7.0 Training

7.1 All staff undertaking this practice must have received training to include:

Demonstration of practice Supervised practice

All staff undertaking the procedure must have been competency assessed and deemed competent in the procedure by a competent practitioner.

8.0 References

Thomas N Renal nursing 4th Edition 2014 Bailliere Tindall

Levy, J. Morgan, J. Brown, E. Oxford handbook of Dialysis 3rd Edition 2009. Oxford University Press.

Royal Marsden Hospital Manual of clinical nursing procedures Eighth edition 2011 Procedure guideline 11.1 Venepuncture

Slow flow Method for post HD blood sampling

Royal Wolverhampton NHS Trust

Renal Dialysis unit

Post dialysis blood sampling using the slow flow method must be used for adequacy as below

Slow-flow method (developed by F Gotch and M Keen, Davis Medical Centre, San Francisco and used by Lister Renal Unit, East & North Herts NHS Trust since 1990; ref 3).

- At the end of the dialysis time turn the blood pump speed down to 100 ml per min.
- Override alarms to keep blood pump operating.
- Wait 15–30 seconds and take samples from the "arterial" line sampling port.
- If more than one blood sample is required, the sample for urea should be the first one taken.