

The Royal Wolverhampton NHS Trust
Specialist Clinical Practice Renal Sub Committee

Practice Reference:	SNCP11
Title:	Performing an activated clotting time
Date of Implementation:	April 2008
Version:	2
Review dates:	April 2008, July 2013
Date of Review:	December 2014
Date of next review	December 2017
Author:	Renal Advanced Nurse Specialist
Practice Location:	Renal Unit Specialist Clinical Practice Folder/ Trust Intranet

1.0 Practice statement

1.1 To monitor clotting times and maintain within predetermined parameters as agreed by renal unit local protocol. (Appendix1)

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

- 1 x 1ml Syringe
- Sharps Box
- Personal Protective Equipment (PPE) Plastic apron, Visor, non-sterile gloves.
- 1 x 23g (blue) needle
- 2% Chlorhexidine in 70% alcohol wipes
- ACT test blood bottle
- G-ACT test machine

3.0 Detailed Action

- 3.1 Provide patient with explanation of procedure and gain consent
- 3.2 Wash hands with soap and water and dry thoroughly
- 3.3 Apply PPE.
- 3.4 Prepare the ACT tube by knocking the glass beads to the bottom
- 3.5 Swab arterial injection port with 2% Chlorhexidene in 70% alcohol wipe and allow to dry for 30 seconds
- 3.6 Attach blue needle to syringe and withdraw 0.4mls blood from the injection port as per SNCP09
- 3.7 Instil blood into ACT bottle and press the start button on G ACT machine.
- 3.8 Tap the base of the blood bottle to ensure proper dispersion of the glass beads and place bottle in the machine. Rotate the tube clockwise until the green detector light comes on.
- 3.9 Dispose of needle in sharps box.
- 3.10 The instrument signal will sound when a clot is detected, and the time in seconds will be displayed on the ICD screen.
- 3.11 Titrate anticoagulation dose according to result and administer to patient as required (see Appendix1) Once test is complete remove ACT test bottle from machine and dispose.
- 3.12 Dispose of relevant equipment in appropriate waste bag.
- 3.13 Remove PPE.
- 3.14 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

Array Medical (2000) Activated Clotting Time Test System. Kent: Helena laboratories.

Lab tests online. UK ACT June 2012

Thomas N, (1998) Renal Nursing 4th Edition 2014 Wiley Blackwell. London

Appendix1

THE ROYAL WOLVERHAMPTON NHS TRUST

SPECIALIST CLINICAL PRACTICES SUB COMMITTEE

RENAL UNIT
LOCAL PROTOCOL ONLY

Anticoagulation Regime for Renal Replacement Therapy **Using G-Act test machine.**

Anticoagulation therapy is required to prevent clotting in the dialysis circuit. This is provided by the use of Heparin.

	CLOTTING TIME GUIDELINES
NORMAL VALUES WITHOUT HEPARIN	180-200

VALUES WITH HEPARIN	
ACUTE/ OR NEW CHRONIC/ A PATIENT	200-220
TIGHT HEPARIN	200-220
CHRONIC PATIENT MAINTENANCE	220-250
CHRONIC PATIENT ON COAGULATION THERAPY - KNOWN TO CLOT	250-300

- 1 Titrate Heparin rate against ACT test and give boluses to achieve target levels.
- 2 If patient has had deranged clotting, low platelet count, or recent surgery, anticoagulation should be TIGHT.