

BLOOD FLOW RATES FOR HAEMODIALYSIS

<i>Lead Clinician:</i>	Dr Diwaker Ramaswamy
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<i>Comments:</i>	Guidelines to supplement policy on Therapeutic blood flow (QB) whilst on Haemodialysis

1.0 INTRODUCTION

It is well documented that adequacy and efficiency of dialysis is enhanced by increasing dialysis time, size of dialyser and blood flow rate. At Shrewsbury and Telford Trust (Sath) we endeavour to titrate prescribed dialysis to the individual patient and attempt to dialyse our patients to a prescription of at least 4 hours 3 x a week using high flux dialysers.

Practice however regarding blood flow rates is variable as there are no set guidelines by the renal association or others regarding minimum and maximum pump speed prescription. Therefore the aim of this document is to provide guideline and foundation to prescriptive blood flow speed used within Sath for Chronic Kidney disease patients who are being established on long term Haemodialysis therapy.

2.0 AIM / PURPOSE

To give clear guidelines which are to be available to all Haemodialysis staff working within SaTH renal units.

To improve patients dialysis therapy and therefore improve morbidity factors which are connected with long term Haemodialysis. (Quality of life issues).

3.0 OBJECTIVES

To optimise clearance during dialysis treatment and promote long-term benefits.
To ensure chronic patients have their BFR increased promptly & effectively.

4.0 DEFINITIONS

BFR – blood flow rates

5.0 SPECIFIC DETAIL MAIN

- Blood flow rates on lines and AVF should be increased to a maximum of 350 - 400ml/min as tolerated by the patient and their access.
- Blood flow rates for AVG – Arterio venous grafts should be kept to 300 mls per minute and restricted to 16g needles to help prolong the life of the graft.
- Minimum acceptable blood flow on established access is 350 mls per minute or 300 mls per minute in some cardiac patients.
- When increasing blood flow rates please repeat recirculation studies & document.
- Patients on NXstage have BFR of 400 – 450. Any blood flow rate higher than 400mls/min to be discussed with the patient's consultant.
- Review needle gauge when increasing BFR to achieve higher BFR & reduce pressures.
- Increased blood flow rate to be altered on CV and patients daily prescription.
- For BFR 350 and above increase dialysate flow rate to 800mls per min. This will improve the osmotic and diffusive drag & improve clearance.
- Please see acute pathway re BFR for acute patients where starting BFR is 180 mls per minute and slowly increased after the first 3 sessions.

6.0 TRAINING

Ongoing staff competency and knowledge base improvement throughout renal training and annual access assessment & update.

6.0 AUDIT

Review of URR as before. The ongoing monitoring of patients monthly bloods and clearance. Note that there are future plans to recognise a higher URR of 70% are being suggested as best practice in some documentation. Regular monitoring of Recirculation studies whether completed manually, transonic or via online machine app.

7.0 REFERENCES

Renal Association Guidelines

8.0 CONTRIBUTION LIST

Consultant Nephrologists: Dr S P Davies, Dr K S Eardley, Dr R Diwakar, Dr B Ramakrishna

Operational Managers: Sr N Stockdale, Sr. Oonagh Le Maitre, Sr S Howells, and Sr K Elgar, Sr P Williams, S/N Julie Cooper.