

1. Introduction and Who Guideline applies to

Haemodialysis or haemodiafiltration prescriptions are individualised in order to give adequate dialysis for each patient. Lack of adherence to this prescription can result in inadequate dialysis or incorrect volume of fluid removal. A maintenance dialysis patient is at risk of raised mortality and morbidity if they are not adequately dialysed. (Daugirdas et al 2001) whilst an acute dialysis patient can be at risk of disequilibrium if given a too efficient dialysis. It is therefore important that the dialysis prescription for each patient is adhered to.

This procedure has been written for all haemodialysis qualified renal care assistants and haemodialysis competent nurse associates and registered nursing staff, who have completed LCAT assessments in commencement of dialysis and are involved in the initiation, or checking of haemodialysis prescriptions. This includes dialysis dose (time), dialyser size, dialysate (both concentration and flow rate) and ultrafiltration volume.

2. Guideline Standards and Procedures

21 Acute dialysis must only be commenced by a haemodialysis competent registered nurse. Maintenance dialysis may be commenced by either a haemodialysis competent registered nurse or haemodialysis competent band 3 renal care assistant

22 The registered nurse/nurse associate/renal care assistant lining & priming the machine will check the patient's dialysis prescription chart and ensure that the correct consumables are on the machine, for example dialyser, dialysate etc.

23 It is the responsibility of the registered nurse/nurse associate/renal care assistant commencing the patient's dialysis session to re-check the dialysis machine against the correct prescription and patient, and also check that the dialysis machine is programmed correctly according to the patient's prescription. This includes dialysis time, profiling, dialyser size, dialysate, ultrafiltration rate and whether HD or pre or post HDF. This check MUST be done prior to commencing the dialysis treatment. They must then sign the maintenance dialysis prescription chart.

24 This check must be repeated within the first hour of dialysis by a registered nurse and the maintenance dialysis sheet counter-signed. If a care assistant commences the dialysis it will need checking by two registered nurses or registered nurse and nurse associate.

25 If the dialysate is changed or replaced during dialysis sessions the two registered nurses doing so are responsible for checking prescription and signing the record sheet (IV policy).

26 Individual patients may have a prescription requiring a combination of 2 different dialysis fluids. The standard dialysate should be used first and changed to the low/high potassium dialysate for the latter part of the session. This minimises the risk to patients from hypo/hyperkalaemia should the subsequent change not take place.

27 Errors in dialysate prescription/administration are considered 'Medication Errors' and should be recorded and reported in line with the Management of Reported Medication Errors Policy.

28 Non-registered nurses, and registered nurses undertaking supervised practice in haemodialysis (not yet completed LCAT assessment in commencing dialysis) should always ensure that dialysis prescriptions are double checked with two registered haemodialysis competent nurses or one competent nurse and one competent nurse associate.

3. Education and Training

Any registered nurse, nurse associate or renal care assistant commencing dialysis unsupervised must have passed an LCAT assessment in commencing dialysis.

4. Monitoring Compliance

| What will be measured to monitor compliance | How will compliance be monitored | Monitoring Lead | Frequency | Reporting arrangements |
|----------------------------------------------------|-----------------------------------------|--------------------------------|------------------|--------------------------------------------|
| Errors in dialysis prescription | Datix reports re errors | Suzi Glover DHoN (Renal) | Monthly | All Datix from renal units emailed to DHoN |

5. Supporting References (maximum of 3)

Daugirdas J, Blake P and Ing T. (2001) Handbook of Dialysis (Third Edition)

6. Key Words

Haemodialysis, Dialysate Prescription, Hypokalaemia, Hyperkalaemia

| CONTACT AND REVIEW DETAILS | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| Guideline Lead (Name and Title) Suzanne Glover Deputy Head of Nursing (Renal) | Executive Lead Richard Baines |
| Details of Changes made during review: Change of guideline lead Change of format Inclusion of haemodiafiltration in addition to haemodialysis Inclusion of band 3 care assistant role Nov 2021 inclusion of nurse associate | |