Haemodialysis (HD) and Haemodiafiltration (HDF)of patients requiring Mobile Renal Replacement Therapy (MRRT) treatment under the care of a Non Nephrology Specialty

University Hospitals of Leicester NHS NHS Trust C21/2019

### 1. Introduction and Who Guideline applies to

This guideline is written for all Haemodialysis (HD) competent Registered Nurses (RN) who have completed LCAT competency in commencement and terminating HD treatment involved in a chronic HD treatment of patients. The Mobile Renal Replacement Therapy (MRRT) service is available for prevalent HD patients who receives HD at any of the satellite renal units and are currently admitted to Glenfield Hospital, Leicester General and Leicester Royal Infirmary with an inter current illness that would be best managed under the care of a specialty other than Nephrology.

### 2. <u>Guideline Standards and Procedures</u>

#### Machine Preparation

- Prepare both the RO (reverse osmosis) and the dialysis machine by checking that it's surfacely clean and in good and safe working condition. The machine needs to have been through a heat disinfection since last use and within the last 48 hours.
- Report any machine related faults that can not be managed by the staff to the renal technicians during working time hours and to the on-call technician during out of hours.

#### Patient Checklist

- To liaise with the patient base ward about the planned schedule for dialysis. Complete the MRRT checklist and if patient is not suitable for the MRRT service, to inform the renal registrar/consultant on call to re-arrange dialysis time for the patient.
- To visit the patient from their base ward prior to transfer to assess the patient's condition and to get assistance where moving and handling is needed for the patient and when checking BESTSHOT and overall patient condition.
- Patient scoring above 6 NEWS is not suitable for MRRT service, to avoid delays of the other patients due next for HD treatment. The scoring patient must be reviewed by medical team and must liaise the case to the on-call renal registrar regarding dialysis treatment.
- Patient's requiring MRRT coming from A&E must be reviewed if safe to come for MRRT service. Patient must have a secured medical bed to go back to and with an allocated consultant/ doctor responsible for the patient prior to transfer for HD treatment.

#### Patient HD Referral

 In the event that there's patient overflow requiring MRRT service, the renal registrar on call will liaise to MRRT team who will be the priority to dialyse.

#### Dialysis Prescription and Treatment

- The dialysis prescription will be generated by the renal registrar/consultant on call or independent nurse prescriber via Nerve Centre.
- Follow the guideline for commencing and terminating Haemodialysis (HD), Haemodialfiltration (HDF) and Plasma Exchange (PE): Trust Ref: C59/2015.

- Although the usual process on the ward and dialysis unit is for the HD prescription and machine programming and connections to be checked by a second HD competent nurse this is not usually possible for the MRRT nurses due to working on sites without other competent HD staff. Due to the higher nurse to patient ratio and frequent assessment of the patient during dialysis it is considered acceptable for the HD prescription to have a single checker when cared for by MRRT staff in an environment without other trained HD staff available. All IV medicines should be second checked with another qualifies RN as per Leicester Medicines Policy..
- A paper sticker HD script must be completed to be inputted at patients medical notes.
- Completed HD treatment must be recorded in renal proton system, patient nursing notes and nerve centre.

# Medicines

- Ensure that drugs are available if required to be administered during HD.
- Liaise to the renal doctors to prescribe in nerve centre the anticoagulant, erythropoiesis stimulating agents, catheter locks or IV antibiotics to be given post HD when needed.
- Contact the pharmacy via telephone or email to order medication stocks.

### Infection Prevention

- Follow infection preventionpolicy B4/2005 & Guideline for commencing and terminating HD, HDF and PE treatments C59/2015 pre HD treatment, during HD treatment and post HD treatment. Use of visor when performing the procedure is mandatory.
- Liaise with the renal technicians if patient requires a designated machine and to ensure that the machine is appropriately identifiable and cleaned according to policy following HD treatment.
- Ensure that the room is cleaned pre and post HD treatment as per Infection Prevention (IP) policy B4/2005 and Cleaning and Decontamination policyfor Infection B5/2008
- Place the appropriate IP posters on patient doors for the patient infection status during dialysis and remove when patient leaves.
- To dialyse patients without risk of cross contamination e.g. not BBV or respiratory illness, first but being aware of any urgency for HD treatment of other patients.
- Manage Sharps as per policy.

### Renal Consumables

- To order consumables to warehouse via telephone or email or to infocharnwoodlogistics.co.uk.
- No over stocking of consumables and observe first in-first out use of consumables.

### Blood Sampling & Blood Transfusion

- Ensure that blood tests required are taken and sent to the lab. Pre HD and post HD, U & E must be taken.
- Blood transfusion can be given whilst on HD provided there is an updated patient consent form, blood transfusion prescription signed by a doctor and available blood at the blood bank arranged by the patient's based ward. This must be second checked with a trained RN competent in blood transfusions.

### Haemodialysis Access

• Any issues with patient vascular access for HD must be referred immediately to the surgeons or to the renal access team.

### Nursing & Medical Cover for MRRT service.

- MRRT Consultant Lead will have the oversight of all patients requiring MRRT and liaise with the MRRT Specialist Nurse.
- In any urgent patient issues that requires urgent medical advice, the MRRT consultant medical lead can be contacted if the on-call doctor is unreacheable.
- The Deputy Head of Nursing (DoN) has the overall nursing support to the MRRT team. In the absence of the MRRT Lead Specialist, the DoN has to oversee the operational service and can be contacted when necessary.
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### Medical Cover for Patients undergoing MRRT

- For non-urgent issues not related to dialysis, the ward doctor can attend to the clinical need of the patient where the MRRT is being delivered. For URGENT issues, the ward base team responsible for the overall care of the patient should be contacted and are expected to come and review the patient immediately.
- For Non-urgent medical issues arising during or in relation to dialysis, The Renal registrar on call or consultant (in their absence) should be contacted.
- In the event of Emergency where the MRRT Nurse requires support of a physician, the ITU Spr-on-call depending on hospital location must be contacted via switch board or in a Cardiac Arrest, a Call must be requested as appropriate.
- Complete Datix in the event of any untoward incident occurs.

### 3. Education and Training

\* MRRT helps with non-renal ward staff training regarding MRRT service across 3 hospital sites.

\* All HD competent registered nurses should have successfully completed the competencies and yearly LCAT assessments identified in the UHL Renal Nurse Development programme or equivalent.

- \* All HD competent registered nurses should have read the BRS Cannulation Guidelines.
- \* Must have the UHL Trust ANTT e-learning must be current.
- \* Hand Hygiene E-learning must be current.
- \* Annual ANTT LCAT assessment is required.
- \*E-meds/Nerve Centre and patient-centre trained.

#### 4. Monitoring Compliance

What will be measured to monitor compliance	How will compliance be monitored	Monitoring Lead	Frequency	Reporting arrangements
Number of Incidents reporting errors in dialysis prescription & administration	Monitor Datix incedent reports	DoN	As reported	
Number of incidents of MSSA/MRSA Bacteraemia	Assessment on admission, transfer and prior to discharge	MRRT Lead Nurse	On Admission & Discharge	

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# 5. Supporting References (maximum of 3)

- \* UHL Aseptic Non Touch Technique (ANTT) Guideline (2015)
- \* UHL Hand Hygiene Policy
- \* Sharps Policy

# 6. Key Words

Haemodialysis, Mobile renal replacement therapy (MRRT)

CONTACT AND REVIEW DETAILS				
Executive Lead				
Details of Changes made during review:				