



## MANITOBA RENAL PROGRAM

<b>SUBJECT</b> <ul style="list-style-type: none"> <li>Changing the Extracorporeal circuit during hemodialysis treatment for the Fresenius 5008 delivery system</li> </ul>	<b>SECTION</b> 30.10 Hemodialysis Equipment and Procedures
	<b>CODE</b> 30.10.09
<b>AUTHORIZATION</b> <ul style="list-style-type: none"> <li>Professional Advisory Committee, Manitoba Renal Program</li> <li>Nursing Practice Council, St. Boniface Hospital</li> </ul>	<b>EFFECTIVE DATE</b> November 2013
	<b>REVISION DATE</b> March 2014 April 2016 October 2018

### PURPOSE:

- To provide instruction for changing the extracorporeal circuit during hemodialysis treatment when required.

### POLICY:

- Nurses working in Hemodialysis who have received instruction from the renal educator or delegate may perform this procedure.
- In the event of blood loss, notify physician and obtain an order to send complete blood count (CBC) next hemodialysis treatment if indicated.

### EQUIPMENT:

- 2- 10 mL syringes with 0.9%NaCl
- Supplies as needed for accessing CVC as per MRP procedure 30.20.02 *Accessing and Locking Central Venous Catheter*
- Supplies as needed for setting up Extracorporeal Circuit as per MRP procedure 30.10.01 *Use of Fresenius 5008 Delivery System* or 30.10.02 *Fresenius 5008 Preparation for Hemodialysis Using the OnLINEplus™ System*

### KEY POINTS:

### PROCEDURE:

- Reinfuse blood if possible as per 30.10.01 *Use of Fresenius 5008 Delivery System* or 30.10.03 *Initiation and Termination of Treatment Using the Fresenius 5008ONLINEplus™ System*.

### KEY POINTS:

- If unable to reinfuse, continue with step 2.
- If extracorporeal circuit is being changed due to blood leak alarm, do not return blood as per MRP Policy 30.10.08 *Fresenius 5008 Blood Leak Alarms; responding to*.

## PROCEDURE:

2. From the treatment screen, note UF time remaining, UF removed, current Na<sup>+</sup> level (if Na<sup>+</sup> profile in use), delivered Kt/V and the amount of heparin infused.
3. Stop the blood pump if not already done. Clamp arterial and venous access lines and blood lines. Using aseptic technique attach a 10mL syringe containing 0.9% NaCl to each access. Flush the access lines and then clamp.
4. Touch Blood Systems menu and then select "Remove all lines".
5. Message appears "Bloodlines will be removed automatically. Keep doors closed whilst waiting". Once lines are unloaded message appears "Please open outer doors to continue." Open the outer doors.
6. Message displayed "Please remove the bloodlines completely and close the doors". Remove and discard all lines. Close outer doors.
7. Message displayed "Please insert the dialyzer coupling into the shunt interlock to empty the dialyzer." Open the shunt door, place the blue dialysate coupling onto the shunt and close the door.
8. Once the dialyzer has drained completely, the message will read "The dialyzer is now empty, Please insert both dialysate couplings into the shunt interlock!" Open the shunt door and place the red coupling onto the shunt and close the shunt door.
9. **DO NOT RETURN THE RED WAND TO THE RINSE CHAMBER ON THE DELIVERY SYSTEM.**
10. Bi-bag will have emptied after "remove all lines confirmed". Open the bicarbonate flap, lift the Bi-bag off, and then replace. Bi-bag will refill.
11. Establish new set up and prime the lines and dialyzer as per MRP Procedure 30.10.01 *Use of Fresenius 5008 Delivery System* or 30.10.02 *Fresenius 5008 Preparation for Hemodialysis Using the OnLINEplus™ System*
12. Enter recalculated parameters for the remainder of the treatment. If using Na<sup>+</sup> profile, the start Na<sup>+</sup> will be the last Na<sup>+</sup> level as recorded in step 1.

## KEY POINTS:

- Details of the interrupted treatment will be displayed in the patient card ID/treatment window.
- If using CVC, perform cleaning procedure as per MRP policy 30.20.02 *Accessing and Locking Central Venous Catheter* or 30.20.04 *Use of Closed Needleless (TEGO) Access Device*.
- If blood still in the lines then message will appear "Remove lines selected. CAUTION! Treatment still in progress. Selection will reset the treatment data and stop the treatment!" Touch Blood lines **REMOVE** button.
- Drain program for the dialyzer is in progress. Message displayed "The dialyzer is being emptied."
- Returning the acid bath red wand to the rinse chamber and closing the flap will require that a T1 be repeated.
- The T1 test does not have to be repeated.
- If less than 2 hours remaining, Na<sup>+</sup> profile will not be available. Set Prescribed Na<sup>+</sup> as ordered.
- Ensure additional reinfusion volume added to total UF volume target if applicable.

**PROCEDURE:**

13. Re-establish treatment as per procedure 30.10.01  
*Use of Fresenius 5008 Delivery System or 30.10.03  
Initiation and Termination of Treatment Using the  
Fresenius 5008ONLINEplus™ System*

**KEY POINTS:****DOCUMENTATION:**

- Hemodialysis Treatment Record form # 1592 or W-00497
- Integrated Progress Notes as required

**REFERENCES:**

Fresenius Medical Care: *5008 Hemodialysis System; Instruction for Use*, 2015, Software version 4.57  
Edition:10B-2015

Fresenius 5008 CorDia: Resource Nurse Training Binder. Revised 14 November 2014.