



**NEPHROLOGY PROGRAM
DEPARTMENT POLICIES AND PROCEDURES**

**Home Dialysis - Section 07 - Medication - HDU 7-09
Self-Administration of Intravenous Iron Therapy in the Home Dialysis Unit
No.: 01432 (TOH Standardized Policy Number)**

ISSUED BY:

Home Dialysis Unit / Clinical Practice
Committee

DATE OF APPROVAL:

2014/11

APPROVED BY:

Program Clinical Lead and Division Head

LAST REVIEW/REVISION DATE:

N/A

CATEGORY:

Medication

IMPLEMENTATION DATE:

2014/11

POLICY STATEMENT:

- Parenteral iron is used for the treatment and/or prevention of iron deficiency associated with chronic kidney disease
- Home hemodialysis patients may have parenteral iron ordered to be given when receiving in-center Hemodialysis treatments e.g. when having access flow measurement (Transonic) or troubleshooting a central line problem. Most patients will require additional doses in the Home Dialysis Unit (HDU)
- The Home Hemodialysis patient will self-administer iron therapy intravenously in the HDU. First choice for iron therapy is Venofer® 100mg. If it is not available, then Ferrlecit® 62.5 mg can be used as a directed substitute. This is in keeping with the self-care model. The Home Hemodialysis patient will be taught to administer parenteral iron as part of their training, and will self-administer via their Hemodialysis central venous catheter (CVC), arteriovenous fistula (AVF) or arteriovenous graft (AVG)
- Self-Care “Iron clinics” are set up in the Home Dialysis Unit, in which patients will be provided with supply kits and a record sheet. These “Iron clinics” will be pre-booked. The patient will self-assess, review the pre-procedure self-assessment sheet with a nurse, access their CVC/AVF/AVG, and self-administer the parenteral iron after being reviewed by a nurse. Patient will remain in the home dialysis unit for at least 30 minutes post administration under medical supervision for any possible reactions
- The first 2 doses of IV iron therapy must be given during training when physicians are available should any adverse events occur
- Peritoneal dialysis patients will receive parenteral iron in the Medical Day Care Unit (MDCU)

ALERTS:

- The use of iron therapy is contraindicated in patients with evidence of iron overload, in patients with known hypersensitivity to Venofer® or Ferrlecit®, or any of its inactive components, and in patients with anemia not caused by iron deficiency
- Hypersensitivity reactions may include anaphylaxis or hypotension. Only administer iron when a physician and therapies are immediately available for the treatment of serious hypersensitivity reactions. Calling bell should be accessible to the patient at any time for safety
- Hypotension reactions may occur with rapid administration. Monitor for signs and symptoms of hypotension during and following each administration of iron intravenously
- Observe for signs and symptoms of hypersensitivity during and after intravenous iron administration for at least 30 minutes and until clinically stable following completion of each administration
- Iron Overload: Lab work will be monitored regularly during iron therapy

INFECTIONS:

The patient's ability to fight infections may be impaired if receiving parental iron. Clinical Indications to withhold IV iron therapy include:

- If the patient is prescribed oral or intravenous antibiotics, hold IV iron therapy and resume dosing after the course of antibiotics are complete
- If the patient is found to be febrile (T > 38.0 ° C) during their pre-assessment hold the iron administration and have the iron therapy reassessed by the Nephrologist
- If the patient is on long term antibiotics greater than 2 weeks, hold the iron administration and have it re-assessed by the Nephrologist

SUPPLIES:

General Supplies	To access CVC	To access AVF/AVG
<ul style="list-style-type: none"> • Venofer® 100mg/5mL Vial • OR Ferrlecit® 62.5 mg/5mL • 1-20mL syringe • 1-18 gauge blunt fill needle • Sodium Chloride 0.9% bag -100mL • 1- alcohol swab • 1- medication label • Tape 	<ul style="list-style-type: none"> • 1- 10 mL syringe • 5- 18 gauge blunt fill needles • 3- 20mL syringes • 5- alcohol swabs • 1- sterile drape • 2- 10cm X 10cm sterile gauze • 2- pair non-sterile gloves • 1- pre-filled syringe Sodium Citrate 4% 	<ul style="list-style-type: none"> • 1- Fistula needle • or 1 Butterfly needle • 2- 20mL syringes • 3- 18 gauge blunt fill needles • 3- alcohol swabs • 1- Chlorhexidine swab • 1- non-sterile gauze 5cm X 5cm • Opsite • Or 1 Band-Aid

PROCEDURE:

1. Prior to arriving to "Self-Care Iron Clinic" the patient will self-assess for signs and symptoms of infection and call HDU to report fever, illness or that they are currently on antibiotics. The HDU nurse will then advise the patient on how to proceed
2. When the patient arrives in HDU, he/she will:
 - a) Be seen by a HDU nurse, who will check the patient into the clinic and provide the patient with "The Venofer® Self-Administration Record", **OR** "The **Ferrlecit®** Self-Administration Record" as ordered
 - b) Perform self-assessment including: measurement of temperature, B/P and pulse
 - c) The nurse will then review the patient's pre-procedure self-assessment and provide the supplies to the patient as appropriate. The nurse will also review the procedure with the patient as required
 - d) Prepare the medication for administration. Draw up 15 mL of NaCl 0.9%, and then draw up 100 mg (5mL) of Venofer® OR 62.5mg (5mL) of **Ferrlecit®** into 20 ml syringe. Attach medication label to the syringe
 - e) **Access CVC:** one lumen of their Hemodialysis catheter as per HDU 5-2 Care and Use of the Hemodialysis Catheter with Tego® Connectors, to include aspiration of the old citrate lock and flush with 20 mL of NaCl 0.9%

OR
 - f) **Access AVF/AVG:** cannulate their AVF/AVG as taught in training and flush fistula needle with 20 mL of NaCl 0.9%
 - g) Connect the 20 mL syringe containing diluted Venofer® OR **Ferrlecit®** and administer over a minimum of 5 minutes
 - h) Measure temperature, B/P, and pulse after iron administration
 - i) Flush Hemodialysis catheter and instill Citrate lock as per HDU 5-2 Care and use of the Hemodialysis Catheter with Tego® Connectors

OR
 - j) Flush fistula needle with 20 mL of NaCl 0.9%, remove needle and hold needle site. Apply gauze and tape or apply Band-Aid to needle site
 - k) Remain in unit for 30 min after administration
- If a patient requests a nurse to use a butterfly needle and administer iron intravenously, the nurse will explain the self-administration policy to patient first. But if the patient insists, the nurse will use the butterfly needle, administer it, and document that iron therapy was administered by nurse

DODUMENTATION:

- The patient will document pre-assessment, administration and post-assessment on “The Venofer® Self-Administration Record” **OR** “The **Ferrlecit®** Self-Administration Record”. The completed forms will be given to HDU nurse. Nurse will then review the patient’s documentation and ensure that the patient has tolerated the procedure prior to the patient leaving the unit
- The Nurse will complete a progress note in Nephrocare using the “**Venofer: Patient Self-Administration at HDU**” **OR** “**Ferrlecit: Patient Self-Administration at HDU**” indicating that the patient/nurse had administered IV iron. The nurse will also document the Venofer® **OR** **Ferrlecit®** administration in the medication section of Nephrocare, indicating in the comments that the **Venofer®** **OR** **Ferrlecit®** was administered by the patient/nurse

RELATED POLICIES / LEGISLATION: N/A

REFERENCES:

Venofer® product monograph:

http://www.venofer.com/PDF/Venofer_IN2340_Rev_9_2012.pdf

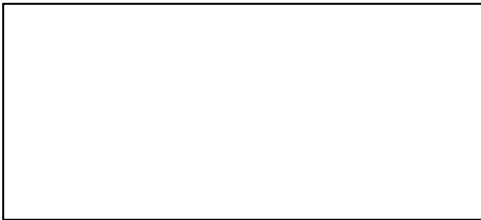
Ferrlecit® product monograph:

<http://products.sanofi.ca/en/ferrlecit.pdf> (s-a Version 3.2 dated May 12, 2014)

TOH Parenteral Manual:

http://infonet/documents_pharmacy/Parenteral%20Manual/2013%20Parenteral%20Manual%20English.pdf

COMMENTS / SIGNIFICANT REVISIONS: N/A



Venofer® Self-Administration Record

Date: _____
Patient Name: _____

Type of Vascular Access: _____

Have you recently been dialysed in-centre or have you been admitted to hospital?
 YES NO

Date of last **Venofer®** administration: _____

Dose: _____mg

Have you previously self-administered **Venofer®**? YES NO

Have you had any previous reaction to Venofer® ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Any sign of infection (fever/cough/other)?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Are you currently on antibiotics?	<input type="checkbox"/> YES	<input type="checkbox"/> NO

	Time	Temperature ° C	Blood Pressure	Heart rate
Pre Dose				

Pre- Assessment reviewed by _____ RN and patient deemed suitable to proceed with Venofer® administration.

	Time	Temperature ° C	Blood Pressure	Heart rate
Post Dose				

Dilute **Venofer®** 100mg (5mL) with 15 mL of NaCl 0.9% in a 20 mL syringe, and then inject it intravenously over a minimum of 5 minutes.

Start time: _____

End time: _____

You must remain on the unit for 30 minutes post administration of Venofer®. Please ensure that you speak to a nurse prior to leaving the unit.

Departure time: _____

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Ferrlecit® Self-Administration Record

Date: _____

Patient Name: _____

Type of Vascular Access: _____

Have you recently been dialysed in-centre or have you been admitted to hospital?

YES NO

Date of last **Ferrlecit®** administration: _____

Dose: _____mg

Have you previously self-administered **Ferrlecit®**? YES NO

Have you had any previous reaction to Ferrlecit® ?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Any sign of infection (fever/cough/other)?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Are you currently on antibiotics?	<input type="checkbox"/> YES	<input type="checkbox"/> NO

	Time	Temperature ° C	Blood Pressure	Heart rate
Pre Dose				

Pre- Assessment reviewed by _____ RN and patient deemed suitable to proceed with **Ferrlecit®** administration.

	Time	Temperature ° C	Blood Pressure	Heart rate
Post Dose				

Dilute **Ferrlecit®** 62.5mg (5mL) with 15 mL of NaCl 0.9% in a 20 mL syringe, and then inject it intravenously over a minimum of 5 minutes.

Start time: _____

End time: _____

You must remain on the unit for 30 minutes post administration of Ferrlecit®. Please ensure that you speak to a nurse prior to leaving the unit.

Departure time: _____