KAISER PERMANENTE®

Name: _____

Kaiser Permanente Member I.D. # _____

Date of Birth _____

IV Iron (INFeD®, Ferrlecit®, Venofer®)
Infusion Therapy Plan Orders

Instructions to Provider

Review orders and note any changes. All orders with ☑ will be placed unless otherwise noted. Please fax completed order form to the infusion center where the patient will be receiving treatment (see fax numbers at the end of this protocol). Lab orders are not included on this form – place orders via usual method. Lab monitoring is the responsibility of the ordering physician.

Please complete all of the following:

Order Date: _____ **Weight:** _____kg **Height**:_____inches	**Diagnosis:** ICD-10 code *(REQUIRED):* _____ ICD-10 description_____

General Plan Communication

- **IV Iron Treatment Criteria**:
  - Does patient have: Ferritin<30 or Ferritin<100 and TSAT<20? Yes/No

    AND
  - Absence of severe/life-threatening anemia (Hgb<7) confirmed? Yes/No
    If NO, recommend Urgent RBC TRANSFUSION

    AND any one of the below:
  - Failure of or intolerance to oral iron: Yes/No
  - History of IBD, gastrectomy or bariatric surgery: Yes/No
  - Dialysis: Yes/No
  - Surgery planned within next 60 days: Yes/No

- Special instructions/notes: _____

Provider Information

- Premedication should be avoided unless there is a history of hypersensitivity.
- Consider methylprednisolone 125 mg in patients with a history of drug allergies, an allergic diathesis or a history of inflammatory arthritis, wherein both parenteral and oral iron have been shown to exacerbate symptoms.
- Diphenhydramine has been removed from intravenous iron protocols. Side effects from diphenhydramine may mimic symptoms of an anaphylactic reaction, making it difficult to differentiate a Fishbane reaction from anaphylaxis. Giving diphenhydramine can cause tachycardia and/or hypotension, converting the minor reaction to a more serious event.
- Fishbane Reaction: an acute, self-limiting and NON-life-threatening combination of symptoms typically characterized by transient flushing and tightness or pain in the chest and back, and without symptoms of anaphylaxis (e.g., hypotension, tachypnea, tachycardia, wheezing, stridor, or periorbital edema). Symptoms typically resolve upon stopping infusion.
- One time test dose is REQUIRED for Iron dextran. Consider repeat test dose if more than 6 months have elapsed since last Iron Dextran infusion. If less than 6 months have elapsed since last Iron Dextran infusion, KPWA pharmacists are authorized to remove the test dose from this plan.
- INFeD commonly given as 1 gm infusion, or alternatively calculate per manufacturer guideline.
- Manufacturer Total Dose calculation (mL) = [0.0442 (desired Hb - Observed Hb) x IBW] + (0.26 x IBW)
  - IBW = ideal body weight in Kg
  - Males = 50 + (2.3 X height in inches over 5 feet); Females = 45.5 + (2.3 X height in inches over 5 feet)

Infusion Therapy

INFeD is the recommended IV Iron product at Kaiser Permanente

☐ **Test dose – Iron Dextran (INFeD) in 0.9% sodium chloride 50 mL IV infusion**

Dose: ☑ **25 mg** *Route:* Intravenous *Frequency:* Once *Infusion Duration:* over 5 minutes.

Note any changes to above regimen: _____

Provider Signature: _____ **Date:** _____

Printed Name: _____ **Phone:** _____ **Fax:** _____

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☐ **Iron Dextran (INFeD) in 0.9% sodium chloride 250 mL IV infusion**
Dose: ☑ **1,000 mg** ☐ _____ **mg** *Route:* Intravenous *Frequency* x1 dose or _____
Infusion Duration: Over 60 minutes.

If infusion-related reaction:
1) STOP infusion immediately; 2) Increase primary infusion to wide open rate; 3) Administer PRN medications per hypersensitivity protocol; 4) Notify MD

Note any changes to above regimen: _____

2nd Line Agents

☐ **Ferric gluconate (FERRLECIT) in 0.9% sodium chloride 100 mL IV infusion**
Dose: ☑ **125 mg** *Route:* Intravenous *Frequency:* Every _____ for _____ doses.
Infusion Duration: Over 60 minutes.
If infusion-related reaction:
1) STOP infusion immediately; 2) Increase primary infusion to wide open rate; 3) Administer PRN medications per hypersensitivity protocol; 4) Notify MD

Note any changes to above regimen: _____

☐ **Iron sucrose (VENOFER) injection**
Dose: ☑ **200 mg** *Route:* **Intravenous slow PUSH Over 5 minutes**. Q Weekly x 5 doses.

☐ **Iron sucrose (VENOFER) in 0.9% sodium chloride 100 mL IVPB infusion**
Dose: ☑ **200 mg** *Route:* Intravenous *Frequency:* Every _____ for _____ doses.
Infusion Duration: Over 15 minutes.

☐ **Iron sucrose (VENOFER) in 0.9% sodium chloride 250 mL IVPB infusion**
Dose: ☑ **300 mg** *Route:* Intravenous *Frequency:* Every _____ for _____3 ____doses.
Infusion Duration: Over 90 minutes.

If infusion-related reaction:
1) **STOP** infusion immediately; 2) Increase primary infusion to wide open rate; 3) Administer PRN medications per hypersensitivity protocol; 4) Notify MD

Note any changes to above regimen: _____

Pre-Meds

☑ Other: _____
Dose: _____ *Route:* Oral *Frequency:* Once, 30 minutes prior to IV Iron infusion

☑ No pre-medications necessary. Contact provider if patient has reaction and requires pre-medications for future doses.

IV Line Care

☑ 0.9% sodium chloride infusion 250 mL
Rate: 30 mL/hr *Route:* Intravenous *Frequency:* Run continuously to keep vein open
Start peripheral IV if no central line

Infusion Reaction Meds

☑ Acetaminophen (TYLENOL) 325 mg tab. Take 2 tablets PO every 4 hours PRN for fever (greater than 100.4 F), myalgias, arthralgias or headache.

☑ Alteplase (CATHFLO ACTIVASE) Inj 2 mg INTRACATHETER PRN x 2 doses. Instill 2 mg to affected port(s) of central venous catheter if sluggish or occluded. Allow to dwell for 30 minutes, if unable to aspirate blood allow to dwell for an additional 90 minutes. May repeat one time if unsuccessful.

Provider Signature: _____ **Date:** _____

Printed Name: _____ **Phone:** _____ **Fax:** _____

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- ☑ Famotidine (PEPCID) (PF) Inj 20 mg. Give IV push over 2 minutes for hives, rash, itching, flushing, and/or swelling in a suspected hypersensitivity reaction. Notify provider if patient experiences a hypersensitivity reaction.
- ☑ methylPREDNISolone Sod Succ (PF) Inj 125 mg (SOLU-Medrol PF). Give 125 mg IV push one time PRN for shortness of breath, bronchospasm, or other symptoms of a suspected hypersensitivity reaction not otherwise specified. Notify provider if patient experiences a hypersensitivity reaction.
- ☑ Sodium Chloride 0.9% IV bolus 1,000 mL. Give IV over 1 hour one time PRN for hypotension due to presumed anaphylaxis. Notify provider if patient experiences a hypersensitivity reaction.
- ☑ EPINEPHrine (Epi-Pen) 0.3 mg/0.3 mL IM Auto-injector. Give IM one time PRN for severe cardiovascular or respiratory symptoms (e.g., dyspnea, wheeze/bronchospasm, stridor, hypoxemia) of a suspected hypersensitivity reaction. Provider must be present upon giving medication.

Lab Review for Nursing

- Baseline labs before initial treatment: CBC, Iron/TIBC, and Ferritin (labs to be done within 2 months prior to infusion)
- Follow up labs: CBC, Iron/TIBC, and Ferritin 2 to 3 weeks after total dose of iron infused then monthly x 3

Nursing Orders

- NOTE: Diphenhydramine has been removed from intravenous iron protocols. Side effects from diphenhydramine may mimic symptoms of an anaphylactic reaction, making it difficult to differentiate a Fishbane reaction from anaphylaxis. Giving diphenhydramine can cause tachycardia and/or hypotension, converting the minor reaction to a more serious event.
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- Iron Sucrose: Given as IVPB or IV push as per orders. If IV push, administer slowly over 5 minutes.
- Monitor patient for signs and symptoms of hypersensitivity during and after iron administration for at least 30 minutes and until clinically stable following completion of the infusion.
- Infusion-related reaction: STOP infusion immediately, and begin primary solution at wide open rate, notify MD, begin monitoring vital signs and administer prn medications for infusion reaction, as appropriate; once patient is stabilized, restart or discontinue infusion as per MD order.
- If patient experiences venous irritation during infusion, assess on pain scale of 0 to 10 and titrate and run fluids concurrently. Mild pain level of 0 to 3: Increase fluids to 100 mL/hr. Moderate pain level of 4 to 6: Increase fluids to 200 mL/hr. Severe pain level 7 to 10: Increase fluids to 300 mL/hr.
- Discontinue IV line when therapy complete and patient stabilized.

References

- INFeD® Prescribing Information. Revised September 2009.
- Auerbach, M et al. Safety and Efficacy of Rapidly administered (one hour) one gram of low molecular weight iron dextran (INFeD) for the treatment of iron deficient anemia. Am J Hematology, 2011;10:860-862.
- Venofer PI
- Lim W, et al. Sang 2019 May;114(4):363-373.
- Crary SE, et al. Ped Blood Cancer. 2011 Apr;56(4):615-619.
- Pinsk V, et al. IMA Journal. 2008 May;10(5):335-338.
- Leijn E, et al. J Nephrol 2004 May-Jun;17(3):423-426.

Kaiser Permanente Infusion Locations

Please refer to the link below for the current list:
https://wa-provider.kaiserpermanente.org/patient-services/ambulatory-infusion

Provider Signature: _____ **Date:** _____

Printed Name: _____ **Phone:** _____ **Fax:** _____