

(place patient label here)

Patient

Name: _____



PROVIDER ORDERS

Order Set Directions:

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Diagnosis: _____
 Allergies with reaction type: _____

CHRONIC HEMODIALYSIS ORDERS

Version 9

1/21/2013

1. TREATMENT ORDERS

- A. Frequency and hours of treatment _____
- B. Dialyzer _____ Reuse _____
- C. Blood pump range _____ ml/min. with goal of _____ ml/min.
- D. Dialysate pump range _____ ml/min. with goal of _____ ml/min.
- E. Access _____ Button hole _____
- F. Needle size-use 15 ga. if possible. Notify provider if unable to use 15 ga.
- G. Dry weight _____
- H. Dialysate settings:
 - K+: _____ meq/L
 - Ca++: _____ meq/L
 - Na+ variation: 138 or _____ meq/L
 - Bicarbonate: 35 or _____ meq/L
 - Temp: _____ °C
 - Step: _____
 - Linear: _____
 - Start: _____
 - End: _____
- I. Heparin 1000 units/ml heparin for bolus and hourly infusion
 - Patient bolus: _____ units
 - Infusion: _____ units /hr Stop _____ minutes before treatment end
- J. Central lines, if present:
 - At end of treatment, pack limbs with Sodium Citrate 4% to the length of each limb or if ordered by provider:
 - Heparinize with 5000 units/ml heparin, the volume of the lumen plus 0.2 ml to each limb.
- K. May utilize crit line for fluid removal dry weight

2. LABORATORY ROUTINE:

- A. On admission (before first dialysis treatment):
 - 1) Dialysis renal panel
 - 2) CBC w/o differential
 - 3) Hepatitis B surface antigen
 - 4) Hepatitis C antibody
 - 5) Hepatitis B surface antibody
 - 6) Hepatitis B core antibody
 - 7) HIV (after consent)
 - 8) Iron profile
 - 9) Ferritin
 - 10) PTH Intact
 - 11) ALT
- B. Monthly:
 - 1) CBC w/o differential
 - 2) Dialysis renal panel
 - 3) Iron Profile
 - 4) ALT
 - 5) Hepatitis B surface antigen, if unvaccinated or susceptible
 - 6) Ferritin monthly if results greater than 1200 ng/ml
 - 7) Glucose - diabetic patients only

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- C. Quarterly
 - 1) PTH intact
 - 2) Ferritin (do monthly if previous result greater than 1200 ng/ml)
- D. Semi-Annually:
 - 1) Hepatitis C antibody
 - 2) Hgb A1c (diabetic patients only)
 - 3) Vitamin D 25 Hydroxy
- E. Annually:
 - 1) Hepatitis B surface antigen if antibody positive
 - 2) Hepatitis B surface antibody if vaccination series completed (If no response after booster, do not recheck)

3. ROUTINE MISCELLANEOUS

- A. On admission:
 - 1) Height
 - 2) Obtain 12-lead EKG from hospital or Clinic. If not available, order 12-lead EKG.
 - 3) TB skin questionnaire and PPD test; if PPD positive obtain chest X-ray (reason for exam: positive TB skin test)
- B. Annually:
 - 1) TB questionnaire yearly. Notify Provider changes in results. TB test if traveling and receiving unit requires test. If positive TB test in past, CXR for possible TB.
 - 2) Influenza vaccine 0.5 ml IM
- C. Pneumovax 0.5 ml IM if has not had, or if > 5 years since last given; MAX 2 doses
- D. Renal Diet:
 - 1) greater than 1.2 grams protein/kg/day, 2 grams Sodium, less than 1 gram phosphorus, less than 2 grams potassium, Fluid restriction of _____ ml/day

4. DIALYSIS HEPATITIS B ORDERS:

- A. On all non-immunized patients, after obtaining consent, give 40 mcg Hepatitis B vaccine IM at month 0, 1,2,6.
- B. One month after 4th dose (month 7) draw Hepatitis B surface antibody. If antibody negative administer one additional dose of Hepatitis B vaccine at month 12.
- C. If previously vaccinated patient who was antibody positive converts to antibody negative repeat vaccine series once.

5. MEDICATION ORDERS:

- A. Tylenol 650 mg po every 4 hours prn mild to moderate pain.
- B. Hypoglycemia Protocol:
 - 1) If capillary blood glucose less than 50 and patient awake and able to swallow, give two containers of glucose liquid or gel orally. Repeat capillary blood glucose in 15 minutes. If less than 70 follow protocol again
 - 2) If capillary blood glucose less than 50 and patient is NOT awake and/or able to swallow, give 50mls of D50 IV Stat over 2-3 minutes. Repeat capillary blood glucose in 15 minutes. If <70, repeat protocol. Notify provider..
 - 3) If capillary blood glucose 50-70 and patient able to swallow, give one container of Glucose liquid or gel orally. Repeat capillary blood glucose in 15 minutes. Notify provider.
 - 4) If blood glucose 50-70 and patient unable to swallow, give 25 ml of D50 IV over 2-3 minutes. Notify Provider.
- C. If dual lumen catheter clotted, administer 2 mg/lumen of CathFlo/sterile water to volume of lumen. Dwell in catheter 60 minutes, then attempt to aspirate catheter. Notify provider
- D. Aranesp _____mcg sq every _____ weeks Adjust dose monthly using following Aranesp Protocol
 - 1) Aranesp is available is the following syringe sizes:
25 mcg, 40 mcg, 60 mcg, 100 mcg, 150 mcg, 200 mcg and 300 mcg
 - 2) Target hemoglobin is 10-11.5 g/dL unless otherwise ordered
 - 3) Maximum Aranesp dose is 300mcg/week or 1200 mcg/month. Notify provider if dose increase would be greater the maximum

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4) Monthly Aranesp dose adjustments:

a. Dose changes for Hgb 8-9.5 gm/dL

Current Dose	New dose
25 mcg	60 mcg
40 mcg	100 mcg
60 mcg	150 mcg
100 mcg	200 mcg
150 mcg	300 mcg
200 mcg	300 mcg

b. Dose changes for Hgb 9.6-10 gm/dL OR Hgb decreases by greater than 0.5 gm/dL

Current Dose	New dose
25 mcg	40 mcg
40 mcg	60 mcg
60 mcg	100 mcg
100 mcg	150 mcg
150 mcg	200 mcg
200 mcg	300 mcg

c. Dose changes for Hgb 10.1-11 gm/dL: NO CHANGES

d. Dose changes for Hgb 11.1-12 gm/dL OR increases is Hgb by greater than 0.5 mg/dL

Current Dose	New dose
25 mcg	↑dosing interval by 1 week (ie if every 2 weeks change to every 3 weeks)
40 mcg	25 mcg
60 mcg	40mcg
100 mcg	60 mcg
150 mcg	100 mcg
200 mcg	150 mcg
300 mcg	200mcg

e. If Hgb is greater than 12 gm/dL

- 1) Hold dose and notify provider.
- 2) Repeat Hgb in 2 weeks

5) Aranesp dose adjustments for restarting after holding doses:

a. If Hgb is greater than 11.1-11.5 gm/dL

Current Dose	New dose
25 mcg	↑dosing interval by 1 week (ie if every 2 weeks change to every 3 weeks)
40 mcg	25 mcg
60 mcg	40mcg
100 mcg	60 mcg
150 mcg	100 mcg
200 mcg	150 mcg
300 mcg	200mcg

b. If Hgb is 10.5-11 gm/dL: Restart at the same dose as before

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c. If Hgb is less than 10.4 gm/dL

Current Dose	New dose
25 mcg	40 mcg
40 mcg	60 mcg
60 mcg	100 mcg
100 mcg	150 mcg
150 mcg	200 mcg
200 mcg	300 mcg

E. Venofer Administration Protocol

- 1) Draw iron studies monthly. Ferritin levels quarterly unless >1200, then do monthly. (With Venofer, iron indices can be checked 48 hours after the last dose given).
- 2) If T-sat < 20%, Ferritin <1200 ng/ml and hemoglobin < 12.5 g/dl – Give Venofer 100 mg IV x 10 consecutive doses with dialysis treatment
- 3) If T-sat 20-30%, Ferritin < 1200 ng/ml and hemoglobin < 12.5 g/d – Give Venofer 100 mg IV every other week with dialysis treatment.
- 4) If T-sat 31-50%, Ferritin < 1200 ng/ml and hemoglobin < 12.5 g/d – Give Venofer 100 mg IV every month with dialysis treatment .
- 5) Hold Venofer for T-sat > 50% and Ferritin >1200 ng/ml.
- 6) Consult provider if T-sat < 20%, Ferritin <1200ng/ml and hemoglobin > 12.5 g/dl regarding Venofer administration.
- 7) Venofer 100 mg may be given slowly IV push undiluted over 5 minutes (20 mg/minute) or by infusion in N.S. No test dose is required.
- 8) Discontinue oral iron if IV iron is ordered.

Provider Signature: _____ Date: _____ Time: _____