

Iron Deficiency/Nutritional Deficiency Algorithms

Pregnant

- **Is your patient...?**
 - Pregnant (2nd or 3rd trimester) hemoglobin
 - Have a history of multiple pregnancies.
 - Breastfeeding or recently breast fed.

Diet

- **Does your patient have or follow....?**
 - A vegetarian or vegan diet
 - Malnutrition

GI Absorption Problem

- **Does your patient have a history of...?**
 - Gastrectomy, duodenal bypass or Bariatric Surgery
 - Gluten-induced allergy
 - Autoimmune Gastritis
 - *H. pylori* infection
 - Chronic use of PPIs or H2 blockers

Chronic Blood Loss

- **Does your patient have a history of...?**
 - GI malignancy or benign lesions
 - Heavy menses, hematuria
 - Frequent blood donations
 - Use of any of the following medications: Salicylates, corticosteroids, NSAIDS, anticoagulants, antiplatelets
 - Von Willibrand's diagnosis

If your patient has any of these causes, please complete the following laboratory studies:

- CBC with diff
- Iron Panel
- Ferritin
- TSH if not completed within the last 12 months.

Inflammation

• Does your patient have any of the following.....?

- Chronic infections in malnutrition
- Chronic Kidney Disease
- Chronic Heart Failure
- Inflammatory Bowel Disease

Post-operative

• Is your patient post-operative....?

- Abdominal surgery
- Back Surgery
- Joint Replacement

If your patient has any of these causes, please complete the following laboratory studies:

- CBC with diff
- Iron Panel
- Ferritin
- TSH if not completed within the last 12 months.

| <u>Cause</u> | <u>Abnormal Lab Value</u> | <u>Recommendations</u> |
|--------------------|--|--|
| Pregnancy | Iron Saturation < 10% Ferritin Level < 20 | Referral to local entity's Infusion Room for IV iron, see attached Standard Work. |
| Diet | Iron Saturation < 10% Ferritin < 20 Hemoglobin < 13g/dL in Males Hemoglobin < 12g/dL in Females | Administer Ferrous Sulfate 325mg BID with Reassess labs again in 90 days. If labs remain low or patient experiences GI distress, consider workup to assess for sources of blood loss. |
| GI Absorption | Iron Saturation < 10% Ferritin < 20 Hemoglobin < 13g/dL in Males Hemoglobin < 12g/dL in Females | Referral to local entity's Infusion Room for IV iron, see attached Standard Work. Draw B12 level as part of workup. |
| Chronic Blood Loss | Iron Saturation < 10% Ferritin < 20 Hemoglobin < 13g/dL in Males Hemoglobin < 12g/dL in Females | If premenopausal, trial oral iron first – Administer Ferrous Sulfate 325mg BID with If patient fails oral iron trial, refer to local entity's Infusion Room for IV iron, see attached Standard Work. |
| Inflammation | Iron Saturation < 10% Ferritin < 20 Hemoglobin < 13g/dL in Males Hemoglobin < 12g/dL in Females | Referral to local entity's Infusion Room for IV iron, see attached Standard Work. Draw ESR or CRP as part of workup. |
| Post-Operative | Iron Saturation < 10% Ferritin < 20 Hemoglobin < 13g/dL in Males Hemoglobin < 12g/dL in Females | Administer Ferrous Sulfate 325mg BID with Reassess labs again in 90 days. If labs remain low or patient experiences GI distress, consider workup to assess for sources of blood loss. |

If you continue to feel that Hematology input is required, we would be happy to see your patient following a Provider-to-Provider discussion; please contact your local Hematology Provider directly via Epic Secure Chat or by calling the office.

Oral iron administered every other day has been recommended for better absorption and tolerance. <https://pubmed.ncbi.nlm.nih.gov/31413088/>