Crohn's & Colitis Foundation's IBD Anemia Care Pathway

Dear Provider,

This is a fact sheet on the IBD and Anemia Care Pathway. In this document, you will find information on the care pathway's purpose and a description of its components. Also included is a diagram and suggested pre-medications and precautions. You may wish to use this resource in your clinical practice.

Introduction

Anemia is a common but under-recognized complication in patients with inflammatory bowel diseases (IBD). Despite published practice guidelines and quality measures for anemia in IBD, screening and management of anemia among IBD patients is suboptimal. In an effort to address this under-met need, the Crohn's & Colitis Foundation initiated the development of an Anemia Care Pathway (ACP) for the purpose of standardizing clinical management of anemia.

The care pathway is structured to identify and target high-risk patients so that appropriate and timely care can be provided. The use of the anemia care pathway, which incorporates guideline recommendations, will help improve patient outcomes. The Anemia Care Pathway is currently in use at several clinical practices participating in the Crohn's & Colitis Foundation's national quality of care initiative, IBD Qorus.

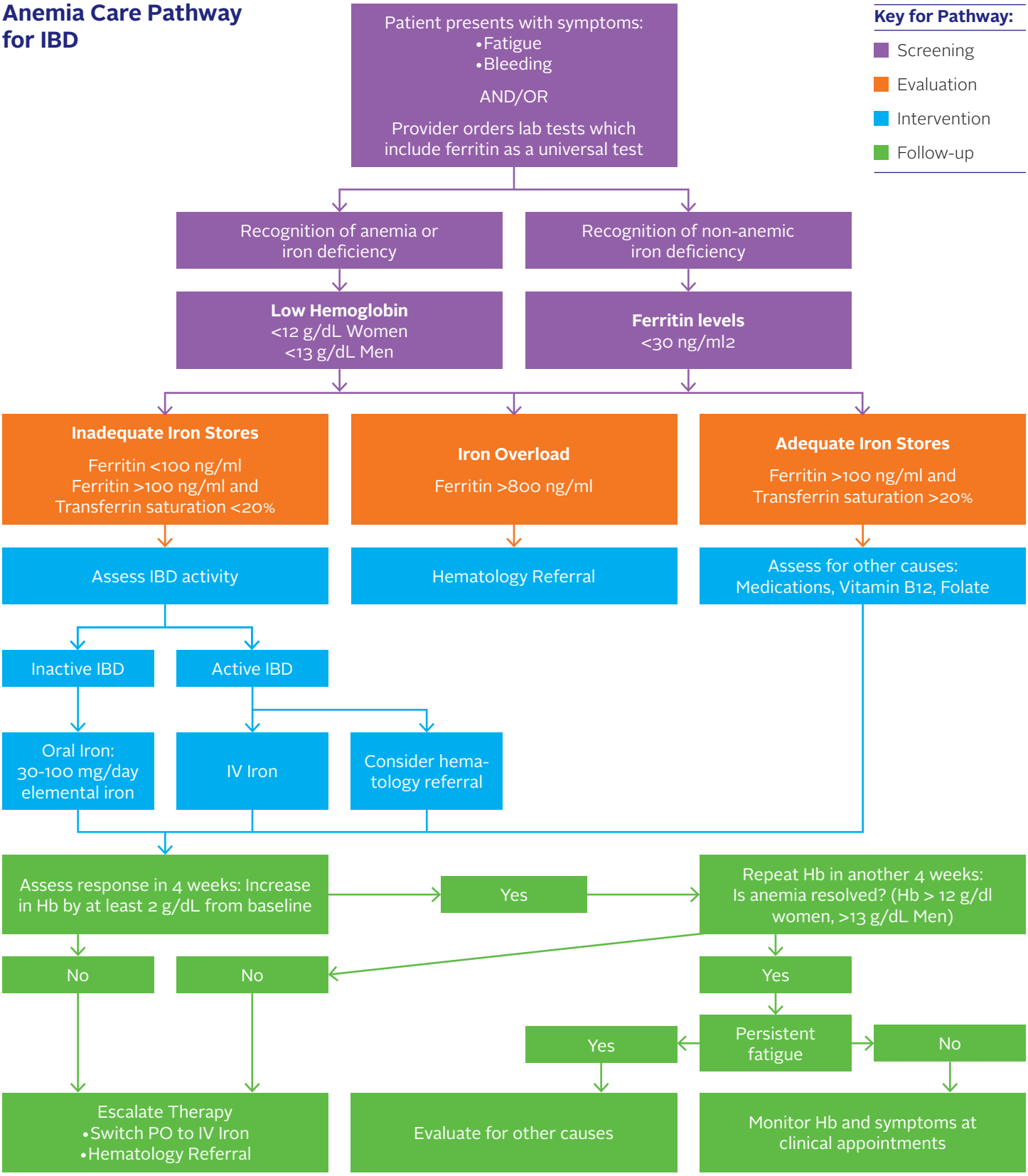
For more information about IBD Qorus and the Anemia Care Pathway, please visit: **ibdqorus.org**

To access an online education activity on Anemia and the care pathway, please visit:
www.crohnscolitisfoundation.org/science-and-professionals/programs-materials/virtual-preceptorship.html

Goals

- Process of identifying patients with anemia or at risk of anemia
- Testing for anemia type and severity
- Means of maintenance, follow-up, and failure to respond
- Recognize correlation between fatigue and anemia

Anemia Care Pathway for IBD



Care Pathway Components

Screening: occurs through two separate pathways: (1) patient driven symptoms, and/or (2) provider driven recognition of laboratory abnormalities.

Evaluation: patients who enter the pathway with either anemia and/or iron deficiency will have further evaluation based on certain lab criteria; patients should be classified based on adequacy of iron stores as defined in screening.

Intervention: patients will be assessed based on the severity of anemia and iron stores to determine the iron therapy needed.

Follow-up: monitor patient closely to see if anemia has been resolved and/or consider escalation of therapy or hematology referral, as needed.

Suggested Pre-Medications

Iron Dextran (INFeD):

- Benadryl 25 mg IVPB
- Zantac 50 mg IVPB
- (optional: Dexamethasone 10 mg IVPB)

Feraheme/Injectafer/Ferrlicit:

- Benadryl 25 mg PO/IV

Precautions

- Parenteral iron is generally very safe. However, iron infusions have been rarely associated with allergic-type (including anaphylactoid) reactions that warrant a protocolized approach to treating an infusion reaction.
- When any iron products are administered, caution should be taken for possible infusion reaction/anaphylaxis/anaphylactoid reaction.
- Infusions should be performed in settings experienced in managing infusion reactions, and medications at hand should include antihistamines, corticosteroids, and epinephrine.

References

1. Hou JK, Gasche C, Drazin NZ, et al. Assessment of Gaps in Care and the Development of a Care Pathway for Anemia in Patients with Inflammatory Bowel Diseases. *Inflamm Bowel Dis.* 2017 Jan;23(1):35-43.
2. Gasche C, Berstad A, Befrits R, et al. Guidelines on the diagnosis and management of iron deficiency and anemia in inflammatory bowel diseases. *Inflamm Bowel Dis.* 2007;13:1545–1553.
3. Dignass AU, Gasche C, Bettenworth D, et al. European consensus on the diagnosis and management of iron deficiency and anaemia in inflammatory bowel diseases. *J Crohns Colitis.* 2015;9:211–222.
4. Gasche C, Lomer MC, Cavill I, et al. Iron, anaemia, and inflammatory bowel diseases. *Gut.* 2004;53:1190–1197.

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Iron Formulations and Dosing Schedules

Formulation	Examples	Elemental iron Concentration	Dose	Schedule
Oral Iron Formulations				
Ferrous fumarate	Available OTC	324/325 mg = 106 mg elemental Fe		100-200 mg/day, divided 2-3 times/day
Ferrous gluconate	Available OTC	240 mg = 29 mg elemental Fe 300 mg = 36 mg elemental Fe 324/325 mg = 39 mg elemental Fe		2-3 mg/kg elemental Fe/day divided 2-3 times/day
Ferrous sulfate	Available OTC	324/325 mg = 65 mg elemental Fe 160 mg (ER) = 50 mg elemental Fe		750-150 mg/day, divided 2-4 times/day
Polysaccharide-iron complex	Available OTC	150mg = 150mg elemental Fe		150-300 mg daily
Parenteral Iron Formulations				
Low molecular weight (LMW) iron dextran[1]	INFeD	50 mg/ml	Total iron deficit correction[2] or 2 ml (100 mg elemental iron)	Single dose (full deficit correction)[3] -OR- Multiple doses until total dose
Ferric gluconate[4]	Ferrlicit	12.5 mg/ml	10 ml (125 mg elemental iron)	Multiple doses
Iron Sucrose	Venofer	20 mg/ml	10 mg (200 mg elemental iron)	Multiple doses
Ferumoxytol[5]	Feraheme	30 mg/ml	17 ml (510 elemental iron)	2 doses of 510 mg IV push, given within 3-4 days
Ferric Carboxymaltose	Injectafer, Ferinject	50 mg/ml	Weight > 50 kg-750 mg Weight < 50 kg-15 mg/kg	2 doses 7+ days apart
Iron isomaltoside	(Europe only)	100 mg/ml	5 ml (500 mg elemental iron)	Single dose of 20 mg/kg

[1] Test dose 0.5 ml before 1st dose (required)
[2] Total dose (ml) = [0.0442 x (desired Hb — observed Hb) x LBW] + (0.26 x LBW)
[3] Not FDA approved schedule
[4] Test dose recommended in patients with history of drug allergies
[5] Notify radiologist if MRI performed within 3 months from infusion

(LBW: lean body weight; ER: extended release; OTC: over the counter)

Adapted from "Assessment of Gaps in Care and the Development of a Care Pathway for Anemia in Patients with Inflammatory Bowel Diseases" by J. K. Hou, et al, 2017, *IBD Journal*, 23, p. 35.