



crohn's colitis

Name of Clinical Care Pathway

Iron Deficiency

Objective

Monitor for and manage iron deficiency

Patient Population

Adult patients (>18 years) with a known diagnosis of inflammatory bowel disease

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Highlight Box

Parenteral iron is recommended over oral iron. However, oral and parenteral iron effectively correct iron deficiency anemia. The decision of the optimal form of iron for each patient remains at the discretion of the prescriber, based on the patient's characteristics and needs.

These clinical decision support tools were developed by Canadian experts in IBD, based on their interpretation of current evidence and considerations specific to Canadian healthcare. International guidelines from Europe and the United States are available. However, these may reflect regional factors not directly applicable in Canada.

Introduction

This care protocol provides a general guideline for monitoring and managing iron deficiency in adults with inflammatory bowel disease. The availability of the listed options for iron replacement may vary across organizations.

IBD provider

1. Review complete blood count (hemoglobin [Hb], Mean corpuscular volume), Fe, ferritin, transferrin, and total iron binding capacity.
2. Confirm iron deficiency (ferritin <20 g/L or iron saturations <15%) or if active disease, ferritin < 100 g/L, iron saturations <15%.
3. Review Hb
 - Hb <70 g/L → Consider urgent packed red blood cell (PRBC) transfusion if symptomatic or urgent iron infusion (if asymptomatic) and repeat Hb in 2 weeks.
 - Hb = 70-100g/L → Iron infusion and repeat Hb in 2 months.
 - Hb >100g/L → Oral iron supplements, if intolerant, organize iron infusion, repeat Hb, iron studies, c-reactive protein in 3 months.
4. See Table 1 for iron replacement options.
5. Arrange for IV iron replacement per protocol.
6. Inform the family physician of the plan for iron replacement.

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Table 1: Options for iron replacement

Iron formulation*	Route	Common dose	Elemental iron equivalence
Ferrous gluconate	Oral	300mg/tablet	35mg
Ferrous sulfate	Oral	300mg/tablet	60mg
Ferrous fumarate	Oral	300mg/tablet	100mg
Iron polysaccharide (Feramax)	Oral	150mg/tablet	150mg
Heme iron polypeptide (Proferrin)	Oral	398mg/tablet	11mg
Iron sucrose (Venofer)	Intravenous	Variable based on patient requirement (100-300mg/dose)	20mg/ml
Sodium ferric gluconate (Ferlecit)	Intravenous	125mg	125mg
Iron isomaltoside (Monoferric)	Intravenous	Variable based on patient requirement**	100mg/ml

*This is not a comprehensive list of all iron products available.

**Simplified dosing table for Iron isomaltoside (maximum single dose is 1.5g or 20mg/kg, whichever is less).

Hb (g/L)	Weight <50 kg	Weight 50-70kg	Weight ≥70kg
≥ 100 g/L	500mg	1g	1.5g
< 100 g/L	500mg	1.5g	2g

References

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