

PREOPERATIVE ANEMIA MANAGEMENT ALGORITHM





NOTES TO PREOPERATIVE ANEMIA MANAGEMENT ALGORITHM:

- 1. If absolute iron deficiency is detected and cause is unknown, gastroenterologist or other appropriate referral to rule out malignancy as a source of chronic blood loss is indicated.
- 2. If ferritin, iron saturation values, or both or other markers of iron-restricted erythropoiesis are inconclusive, further evaluation to rule out iron deficiency or iron sequestration due to inflammation/chronic disease may be necessary.
- 3. A therapeutic trial of oral iron therapy would confirm absolute iron deficiency but may be impractical in the presurgical patient. No response to iron therapy may not rule out absolute iron deficiency because of patient non-compliance, ongoing blood (iron) losses in excess of oral iron absorption, and/or diminished gastrointestinal absorption and transport of iron due to inflammation.
- 4. Anemia in the setting of decreased transferrin saturation (< 20%) in the setting of decreased glomerular filtration rate (GFR < 60) will often respond to intravenous iron. Referral to a nephrologis may be indicated.
- 5. Additionally, iron-restricted erythropoiesis due to iron sequestration, functional deficiency, or both must be considered.

REFERENCE

Goodnough LT, Maniatis A, Earnshaw P, Benoni G, Beris P, Bisbe E, Fergusson DA, Gombotz H, Habler O, Monk TG, Ozier Y, Slappendel R, Szpalski M. Detection, evaluation, and management of preoperative anaemia in the elective orthopaedic surgical patient: NATA guidelines. Br J Anaesth. 2011 Jan;106(1):13-22.