

IDA/Patient Blood Management

NALHN Outpatient Service Information & Referral Guidelines

Description of Service:

Iron deficiency (ID) and iron deficiency anaemia (IDA) are common conditions; many pathological states commonly lead to severe iron depletion. Patient blood management aims to improve clinical outcomes by optimizing the patient's own blood volume and red cell mass, see National Blood Authority Australia website for related publications and tools and additional information.

Conditions Include:

- > Patients undergoing surgical procedures where significant blood loss is possible
- > Pre-existing medical conditions that may contribute to iron deficiency, for example colo-rectal cancer, menorrhagia and osteoarthritis.

Anaemia management:

Anaemia is the most common disorder of the blood. It can originate from a range of causes and may be classified by an examination of red blood cells or haemoglobin, identification of underlying causes, and assessment of clinical features.

The three main anaemia classes include:

- > excessive blood loss - acutely such as a haemorrhage or chronically through low-volume loss
- > excessive blood cell destruction - haemolysis
- > deficient red blood cell production - ineffective haematopoiesis (SA Health/BloodSafe)

Stages of iron deficiency:

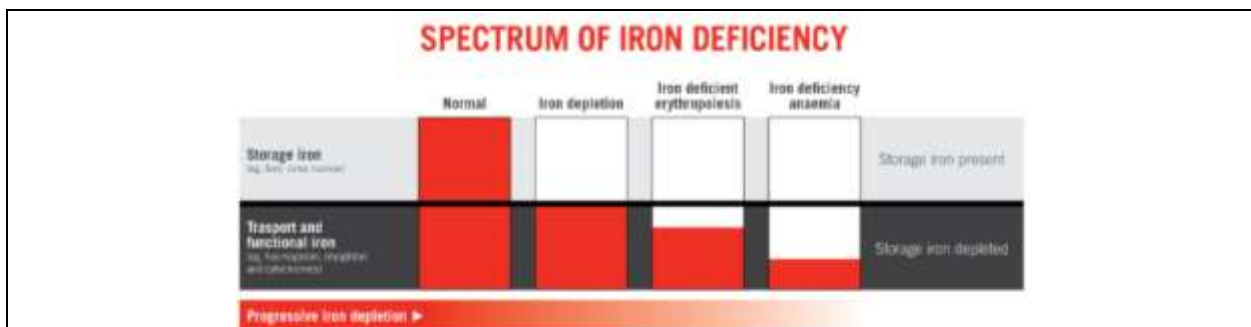


Diagram modified with permission from Sarah Cusick, PhD, Centers for Disease Control and Prevention, 200

Iron depletion	<ul style="list-style-type: none"> • Ferritin levels decrease as body stores become depleted • Transferrin saturation, reflecting transport iron, declines • Total iron binding capacity (or the number of available sites for transferrin to bind iron) increases
Iron deficient erythropoiesis	<ul style="list-style-type: none"> • Iron available for red cell production is limited, however haemoglobin (Hb) within normal range, but may be lower than the person's usual set point. • Red cells distribution width (RDW) increases as impacted red cells will vary in size. • Mean cell haemoglobin (MCH) and mean cell volume (MCV) are usually still in the normal range, but may have fallen from previous levels
Iron deficiency anaemia	<ul style="list-style-type: none"> • Red cell production is reduced resulting in low Hb, MCH and then MCV • As Hb progressively decreases abnormal red cells such as elliptocytes and pencil cells may appear on the blood film

Goddard AF, James MW, McIntyre AS, Scott BB on behalf of the British Society of Gastroenterology. Guidelines for the management of iron deficiency anaemia. Gut 2011;60:1309–1316. Available from: <http://www.bsg.org.uk> and transfusion.com

Acknowledgement: Content for this document was primarily sourced through the SALHN Specialty Outpatient Guidelines 2014/15

Version	Date from	Date to	Amendment
1.0	July 2016	July 2017	Original

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< 2 month to non-deferrable surgery

- > Consider IV iron infusions if oral iron is contraindicated, not tolerated or not effective
- > For NALHN Patient Blood Management advice email: Health.NALHN_PBM@sa.gov.au

QUICK ACCESS CLINIC (QACs)

- > For more information about NALHN Outpatient services: www.sahealth.sa.gov.au/NALHNoutpatients

Resources:

Referral for IV iron Infusion & BloodSafe prescribing checklist for IV Iron	NALHN Referral Document IV Iron Prescribing Checklist
Consumer information Oral and IV iron fact sheets are available in 10 languages see www.sahealth.sa.gov.au/bloodsafe iron disorders and iron therapy	Boosting your blood with iron Intravenous iron infusions
Recommended oral Iron preparations	Oral Preparations for Treatment of Iron Deficiency Anaemia (IDA) in Australia
Carboxymaltose (FERINJECT®) prescribing and administration procedure	(To be included)
Preoperative haemoglobin assessment and optimisation template	Template
NBA PBM guidelines	Module 2 Perioperative Quick Reference Guide Module 3 Medical Quick Reference Guide
SA Health Clinical information – Anaemia management http://www.sahealth.sa.gov.au/bloodsafe	
National Blood Authority Resources <ul style="list-style-type: none"> • Patient Blood Management Guidelines https://www.blood.gov.au/pbm-guidelines • Publications and Tools https://www.blood.gov.au/resources BloodSafe Australia Resource Centre, https://bloodsafelearning.org.au/resource-centre/ <ul style="list-style-type: none"> • The Iron Deficiency Anaemia (IDA) Algorithm is now available for iOS (iPhone, iPad and iPod) and Android • IDA App – BloodSafe eLearning Australia 	

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