

FIT FOR SURGERY

FIT FOR LIFE



PATIENT BLOOD MANAGEMENT

Patient Blood Management improves patient outcomes by improving the patient's medical and surgical management in ways that boost and conserve the patient's own blood.

One of the key areas where general practitioners can contribute to patient blood management is in the preparation of patients who are about to undergo elective surgery where blood loss is anticipated.

Ensuring iron stores are replete prior to surgery optimises the red cell mass and may prevent the need for a blood transfusion if the patient experiences blood loss during surgery.



ANAEMIA AND ELECTIVE SURGERY

Anaemia and iron deficiency has been identified as a significant issue in patients who are undergoing elective surgery.

Studies have estimated anaemia to be present preoperatively in around one in five patients.

Patients with preoperative anaemia have other risks associated with surgery. One study found a five fold increase in 90 day mortality, another found increasing 30 day mortality associated with decreasing haematocrit.

Iron deficiency in the absence of anaemia is also a risk as it may impact an individuals ability to respond to blood loss.

If anaemia is identified it is important that the underlying cause is determined – this algorithm deals with decisions regarding therapy for anaemia and iron deficiency only.



ANAEMIA NEEDS TO BE CONSIDERED IN ALL PATIENTS UNDERGOING ELECTIVE SURGERY WHERE BLOOD LOSS IS ANTICIPATED.

Published September 2015.

Level 7/418A Elizabeth St
Surry Hills NSW 2010
PO Box 1147
Strawberry Hills NSW 2012

☎ 02 8217 8700
✉ 02 9211 7578
@ info@nps.org.au
🌐 www.nps.org.au

Independent, not-for-profit and evidence based, NPS MedicineWise enables better decisions about medicines and medical tests. We are funded by the Australian Government Department of Health.
© 2014 National Prescribing Service Limited ABN 61 082 034 393

 NATIONAL BLOOD AUTHORITY
AUSTRALIA

 NPS
MEDICINEWISE

This information is not intended to take the place of medical advice and you should seek advice from a qualified health professional. Reasonable care is taken to provide accurate information at the date of creation. Where permitted by law, NPS MedicineWise and the National Blood Authority disclaim all liability (including for negligence) for any loss, damage or injury resulting from reliance on or use of this information.

FIT FOR SURGERY FIT FOR LIFE

INFLAMMATORY INFLUENCE

Pre-operative (elective) patient blood management decision aid

Is there evidence of anaemia?

Females

Hb < 120 g/L

Males

Hb < 130 g/L



Establish replete iron stores
before surgical date



Ferritin is < 100 mcg/L

Iron deficiency anaemia

Commence IV iron therapy.

Investigate possible causes.

Consider referral.

Reassess Hb after iron stores replete.

Ferritin <300 mcg/L
and iron Saturation
is more than 20-30%

No treatment necessary.

Ferritin <300 mcg/L
and iron Saturation
is under 20-30%

Iron deficiency anaemia

Commence IV iron therapy.

Investigate possible causes.

Consider referral.

Reassess Hb after iron stores replete.

Establish replete iron
stores and then reassess.
May require referral
investigation. If anaemia
continues after iron therapy
erythropoietic stimulating
agents might be considered
especially in the presence of
renal insufficiency or failure.

Note: The underlying cause of iron deficiency and anaemia should be investigated in conjunction with treatment.