



European Board of Anaesthesiology

UEMS Anaesthesiology Section

European Board of Anaesthesiology (EBA) recommendations for Preoperative anaemia and Patient Blood Management

These recommendations use the WHO definition of anaemia; Hb less than 130 g/L for men and 120 g/L for women and are based on those of the Government of Western Australia Patient Blood Management Programme <http://www.health.wa.gov.au/bloodmanagement/home/> where further details are available.

Patient blood management programme

All elective surgical patients should be evaluated as early as possible to coordinate scheduling of surgery with optimisation of the patient's haemoglobin and iron stores.

All patients planned for major surgery should have any preoperative anaemia identified, evaluated and managed because preoperative anaemia is associated with increased likelihood of transfusion, increased morbidity, increased mortality, and increased length of stay in ICU and hospital.

To implement the above recommendations a multimodal multidisciplinary patient blood management programme should be set up. This should include preoperative optimisation of red cell mass and coagulation status; minimisation of perioperative blood loss, including meticulous attention to surgical haemostasis; and tolerance of postoperative anaemia.

Iron and erythropoiesis-stimulating agents

In surgical patients with, or at risk of, iron deficiency anaemia preoperative iron therapy is recommended.

Oral iron therapy should be given in divided daily doses but may not be well tolerated or effective. IV iron therapy should be considered particularly if rapid iron repletion is required (e.g. <2 months to non-deferral surgery)

In patients with preoperative anaemia where erythropoietin is indicated it must be combined with iron therapy

Surgical patients with suboptimal iron stores (as defined by a ferritin level <100 µg/L) in whom substantial blood loss (blood loss of a volume great enough to induce anaemia that would require therapy) is anticipated, should be treated with preoperative iron therapy.

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In patients with preoperative iron-deficiency anaemia or depleted iron stores, treatment should be with iron alone. In patients with anaemia of chronic disease (also known as anaemia of inflammation), erythropoietin may be indicated.

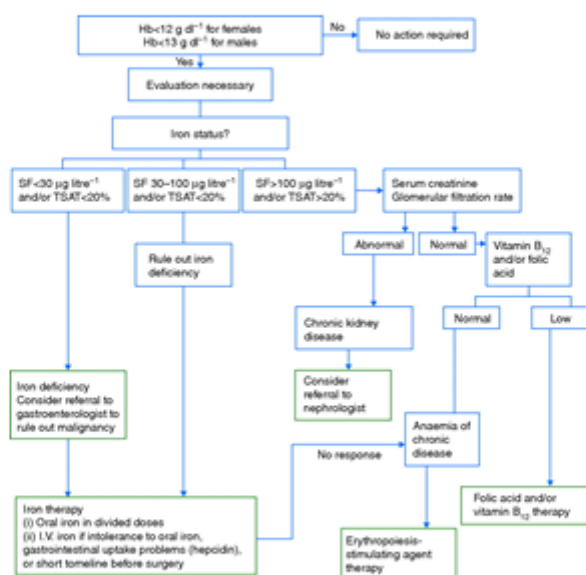
References

Kozek-Langenecker SA, Afshari A, Albaladejo P, et al. Management of severe perioperative bleeding: Guidelines from the European Society of Anaesthesiology. *E JA* 2013; 30,6: 270–382.

Goodnough LT, Maniatis A, Earnshaw P, et al. Detection, evaluation, and management of preoperative anaemia in the elective orthopaedic surgical patient: NATA guidelines. *Br J Anaesth* 2011; 106:13–22.

Examples of algorithms for the detection, evaluation and management of preoperative anaemia

Proposed algorithm for the detection, evaluation, and management of preoperative anaemia.



Goodnough LT et al. *Br. J. Anaesth.* 2011;106:13-22