



Don't transfuse red cells for Hematinic deficiency anemias without hemodynamic instability

Blood Transfusion has been the routine medical response to manage anemia rather than treating the primary causes. Patients with anemia due to hematinic deficiency (Iron, Vitamin B12, Folate deficiency) without hemodynamic instability, even with low hemoglobin levels, should be given oral and/or intravenous iron, intramuscular vitamin B12, or folate supplements, respectively. If red cell transfusion is essential, single units of red cells should be transfused.

In addition, it is recommended to evaluate patients for their risk of transfusion and then take the appropriate measures to reduce that risk. Measures include active protocols for early identification of anemia or the risk of developing anemia before elective surgeries, in hospitalized patients and non-surgical outpatients.

Anemia should be actively managed to reduce the likelihood of transfusion and improve patient outcomes. Recognition, diagnosis, and initial treatment of anemia as early as possible before and during an inpatient admission may help avoid the need for transfusion during that hospital admission as well as after discharge or during future hospital admission.

Lin DM, Lin ES, Tran MH. Efficacy and safety of erythropoietin and intravenous iron in perioperative blood management: a systematic review.Transfus Med Rev. 2013 Oct;27(4):221–34.

Khalafallah AA, Yan C, Al-Badri R, et al. Intravenous ferric carboxymaltose versus standard care in the management of postoperative anaemia: a prospective, open-label, randomised controlled trial. Lancet Haematol. 2016;3:e415–25.

Pinilla-Gracia C, Mateo-Agudo J, Herrera A, Muñoz M. On the relevance of pre-operative haemoglobin optimisation within a Patient Blood Management programme for elective hip arthroplasty surgery. Blood Transfus. 2020;18(3):182-190. doi:10.2450/2020.0057-20.

Santos AA, Silva JP, Silva Lda F, Sousa AG, Piotto RF, Baumgratz JF. Therapeutic options to minimize allogeneic blood transfusions and their adverse effects in cardiac surgery: a systematic review. Rev Bras Cir Cardiovasc. 2014 Oct-Dec;29(4):606-21. doi: 10.5935/1678-9741.20140114. PMID: 25714216; PMCID: PMC4408825

Joint United Kingdom Blood Transfusion and Tissue Transplantation Services Professional Advisory Committee