

Hope for the best, prepare for the worst: an audit of pre-operative anaemia in non-emergency surgery

Sorcha Coleman

University Hospital Limerick, Ireland

Abstract

The World Health Organisation defines anaemia as a haemoglobin of $<13\text{g dL}^{-1}$ in males, and $<12\text{g dL}^{-1}$ in females, at sea level. Moreover, as the WHO definition of anaemia is based on standard deviations from the mean haemoglobin, one could postulate that a Hb of $<13\text{g dL}^{-1}$ would be a more appropriate target for preoperative Hb optimisation among both genders.

One hundred consecutive pre-operative haemoglobins were analysed retrospectively. Emergency and orthopaedic cases were excluded. Of the cases examined, 55 were male and 45 female. In the male cohort, 27 patients were anaemic - with haemoglobins of less than 13g dL . In the female surgical patients, 13 individuals had haemoglobins of less than 12g dL . 10 per cent of patients examined had no preoperative bloods done. These were exclusively otolaryngological procedures. Of the cohort, 5 patients had haemoglobin of less than 9g/dL . i.e. severe anaemia. These patients were all male and predominantly had gastrointestinal surgeries.

Preoperative anaemia is independently associated with worse clinical outcome and is a strong predictor of a patient's requirement for allogenic blood transfusion, which itself increases the risk of post-operative morbidity and mortality. It has been proven that chronic anaemia can be a marker for other comorbidities. Non-emergent surgeries may be postponed in order to diagnose the cause of lowered haemoglobin, and correct it - depending on its cause, severity, the urgency of the procedure and its expected blood loss. This can be alleviated by oral or intravenous iron in iron deficiency anaemia. Supplemental erythropoietin can also increase patients' haemoglobin levels but is advised to be used in conjunction with supplemental iron

Biography:

Dr. Sorcha Coleman graduated last year from National University of Ireland, Galway. She is currently employed as an Anaesthesiology Senior House Officer at University Hospital Limerick, which serves a catchment of just under 400,000 in Ireland's Midwest.

Speaker Publications:

1. Tackling a Challenging Intubation in a Child: Awake Fibre-Optic Intubation Using Dexmedetomidine



6th [International Conference on Surgery and Anaesthesia](#);
Webinar - April 13-14, 2020

Abstract Citation:

Sorcha Coleman, Hope for the best, prepare for the worst: an audit of pre-operative anaemia in non-emergency surgery, Anesthesia 2020, 6th International Conference on Surgery and Anaesthesia April 13-14, 2020.

(<https://surgery-anaesthesia.annualcongress.com/abstract/2020/hope-for-the-best-prepare-for-the-worst-an-audit-of-pre-operative-anaemia-in-non-emergency-surgery>)

