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PERI-OPERATIVE ANAEMIA: MORE THAN HALF ANAEMIC AT DISCHARGE

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THE management of peri-operative anaemia differs between hospitals in Australia and New Zealand, with patients often discharged after surgery with anaemia, leading to a call standardized management from the authors of research published today by the *Medical Journal of Australia*.

"About one-third of patients who present for major surgery have anaemia, and as many as three-quarters have it when discharged from hospital," wrote the authors from the POSTVenTT Study Collaborative, led by Professor Toby Richards from the University of Western Australia and the Fiona Stanley Hospital in Perth.

"Peri-operative anaemia is associated with higher post-operative complication rates, longer hospital stay, poorer quality of life, and delayed recovery.

"In their patient blood management guidelines, the Australian National Blood Authority (ANBA) and the Association of Anaesthetists of Great Britain and Ireland (AAGBI) recommend that anaemia be identified, evaluated, and managed prior to surgery, that tranexamic acid be administered during the procedure if blood loss sufficient to cause anaemia is anticipated, and that a restrictive post-operative blood transfusion strategy be applied, haemoglobin routinely assessed, and early oral iron administration be avoided after surgery."

Richards and colleagues analysed data from people aged 18 years or more who underwent major abdominal surgery during two 2-week periods in July 2021 in 56 hospitals across Australia and New Zealand, to see how many were managed according to ANBA guidelines. The secondary outcomes of the analysis were anaemia prevalence, post-operative complications, length of hospital stay, re-admission within 30 days of discharge.

"Data were available for 2730 eligible patients (mean age, 56.7 years; SD, 17.3 years), including 1558 women (57.1%)," they reported.

"Haemoglobin levels prior to surgery were documented for 2461 of 2727 patients (90.2%), 689 of whom had anaemia (28.0%).

"Pre-operative anaemia assessment and management were associated with lower likelihood of intra-operative (adjusted odds ratio [aOR], 0.33; 95% CI, 0.19–0.57) and post-operative blood transfusion (aOR, 0.36; 95% CI, 0.25–0.53), and of post-operative complications (aOR, 0.79; 95% CI, 0.63–0.99).

"Tranexamic acid was administered during 128 of 2728 procedures (4.7%); a restrictive transfusion strategy was followed for 96 of the 167 patients who received post-operative blood transfusions (58%).

"Post-operative anaemia was identified in 1227 of 2069 patients (59.3%) in whom haemoglobin was assessed prior to discharge. The proportions of people re-admitted to hospital within 30 days was larger than for patients with anaemia at discharge (169 of 1207 patients followed up, 14.0% v 61 of 825, 7.4%). Haemoglobin assessments were recorded by 30 days after discharge for only 288 patients with post-operative anaemia (24.3%)."

Richards and colleagues wrote that although most patients were investigated appropriately prior to major abdominal surgery, "most patients had anaemia at discharge, but few received appropriate management or follow-up".

"Hospital re-admission within 30 days was more frequent among people who had anaemia at discharge. Improving the identification and management of peri-operative anaemia could improve patient outcomes after surgery.

"The management of peri-operative anaemia needs to be improved to enhance surgical outcomes," they concluded.

Results will be presented in a FREE WEBINAR on Monday 10 October at 3pm-4:30pm AWST, by the TASMAN and POSTvenTT team.

Register at https://www.eventbrite.com/e/postventt-webinar-tickets-428333526107

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