

837 High Prevalence of Anaemia and Mortality in Older Patients Undergoing Emergency Laparotomy

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Aim: Anaemia affects 1 in 10 elderly (>65) patients with a myriad of causes. Elderly patients undergoing emergency laparotomy often present with anaemia. Little is known however about the prevalence of anaemia in older people who require emergency laparotomy and the influence it may have on their outcomes.

Method: Elderly patients (>65-years old) undergoing an emergency laparotomy between May 2016–November 2018 in a tertiary trauma centre were prospectively identified. Data included patient demographics, haemoglobin, MCV and ferritin, blood transfusions and iron products administered, readmissions and mortality.

Results: 231 patients underwent emergency laparotomy. Prevalence of pre-operative anaemia in this group was 43%. 5% were very-anaemic and 38% mildly-anaemic. Ferritin was checked within 89 patients; insufficient levels were present in 20%. 31% of all patients were given blood in the peri-operative period. 100% of patients discharged, were anaemic. For pre-operative anaemic vs non-anaemic patients, ASA grade was higher (4 vs 3), readmission rate was 19% vs 18%, 30-day mortality was 18% vs 14% and 1-year mortality rate high (34% vs 22%, $p < 0.05$). Very-anaemic patients (92%) received peri-operative blood compared to (41%) of mildly-anaemic patients. 30-day mortality was 0 vs 21% in very-anaemic vs mildly-anaemic patients. Mortality was 45.8% in patients who received transfusions compared to those who did not 19.9% ($P < 0.0001$).

Conclusions: The prevalence of anaemia in older patients undergoing emergency laparotomy is high and related to significantly increased mortality (12 months after surgery). We have identified a high-risk group of older patients with mild anaemia on presentation who may be at increased risk of mortality 3 months after surgery.