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LETTERS

SAFE AND APPROPRIATE BLOOD TRANSFUSION

Mechanism based treatments for anaemia in advanced cancer

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Murphy and colleagues highlight the need to transfuse blood safely and appropriately using a more restrictive approach—transfusing at a lower haemoglobin threshold and using only one unit at a time.[1] This approach is associated with less morbidity and mortality, with similar efficacy. However, the decision whether or not to transfuse needs more attention. In haemodynamically stable patients with chronic anaemia, the benefits of red cell transfusion are far from clear.[2] In part, this probably reflects inadequate assessment and diagnosis of the underlying anaemia.

Anaemia is common in patients with advanced cancer in whom standard management is often red cell transfusion.[3] However, a recent Cochrane review showed that only about half of patients benefit, and the effect lasts only 10-14 days.[4] More worryingly, 23-35% of transfused patients died within 14 days of transfusion, which suggests either inappropriate selection or increased risk of harm from transfusion.

Anaemia in advanced cancer is likely to be caused by functional iron deficiency—hepcidin mediated inhibition of iron metabolism in the presence of systemic inflammation.[5]

Mechanism based treatments for functional iron deficiency can include interleukin antagonists and intravenous iron. These are relatively safe and effective interventions in other chronic diseases, but research is now needed to examine their roles in advanced cancer. Palliative care practice needs to move away from red cell transfusion towards more mechanism based treatments that include more detailed assessment of anaemia.

Competing interests: None declared.

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