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LETTER TO THE EDITOR

Patient Blood Management: where to start?



Patient Blood Management: por onde começar?

Dear Editor,

Most anesthesiologists recognize the harmful effects of transfusion therapy and try to avoid exposure to allogeneic blood, although some of them decidedly have no interest in the subject and perform transfusion without physiological or even laboratory criteria. However, it is likely that there are anesthesiologists who have never transfused one bag of packed red blood cells (RBCs) and/or fresh frozen plasma and this makes the subject blood transfusion quite relevant and generally controversial.

Blood is the most transfused organ in the world, with about 14 million units of packed RBCs transfused each year, which represents a cost of approximately US \$3 billion (average of \$225 per RBCs).¹ Having in your hospital a program that combats this “need” for blood transfusion can improve patient outcomes, minimize risk, and reduce costs. In this sense, the term Patient Blood Management (PBM) was created, which consists of applying a multidisciplinary approach based on medical evidence and surgical concepts that is hospital independent and patient-centered for early diagnosis and treatment of anemia, application of blood conservation techniques, careful surgical hemostasis, and rational use of blood products in order to improve above all the patient’s prognosis. Since 2010, the World Health Organization recommended the application of PMB as a strategy for reducing the number of RBCs transfusions worldwide.²

And why start using such a program? Statistical data provide the answer. Hospital stay of non-transfused patients is on average 25% lower than that of transfused patients.³ Studies show that the implementation of a transfusion strategy program in heart surgery reduces death rate by 47% and post-surgical hospital costs by 50%.⁴ However, the point considered more important and in which probably all anesthesiologists can act in a simple and very effective way is the management of preoperative anemia. It is very easy to diagnose an anemic patient in a pre-anesthetic

consultation, as well as treat him (for such, it is worth reading these two good articles on how to manage an anemic patient during the pre-anesthetic visit).^{5,6} Within a very reasonable period of 15–20 days we can manage the anemic condition of the patient and he may undergo surgery within acceptable limits. And that makes all the difference, as preoperative anemia is directly related to red blood cell transfusion during surgery, which is a cause of increased morbidity and postoperative mortality.^{7–9} The preoperative diagnosis and appropriate treatment of anemia reduce the incidence of transfusion by 62%.¹⁰ Many of us, anesthesiologists, believe that anemia is not as frequent or is harmless, but according to the World Health Organization data there are more than two billion anemic people worldwide.¹¹ On average, 15–40% of patients have anemia at the time of surgery and, according to the concepts of PBM, anemia is a contraindication to elective surgery, with an expected moderate to severe blood loss.¹²

So, here is a proposal and a challenge: anemia should be diagnosed and treated before surgery. That alone is the first and major step to reduce blood transfusion, which will greatly benefit the patient and improve the quality of our anesthesia.

Conflicts of interest

The authors declare no conflicts of interest.

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