

Blood Transfusion Strategy in Patients with Acute Myocardial Infarction

A randomized trial showed that a more-restrictive strategy was noninferior.

In previous large randomized trials, restrictive transfusion strategies benefited patients with anemia, but those trials excluded patients with acute myocardial infarction (MI). In this study, researchers randomized 668 adults who were hospitalized in 35 French or Spanish centers with acute MI and hemoglobin (Hb) levels between 7 and 10 g/dL to either a restrictive transfusion strategy (triggered by Hb \leq 8 g/dL) or a liberal strategy (triggered by Hb \leq 10 g/dL).

At 30 days, major adverse cardiac events (i.e., all-cause death, stroke, recurrent MI, or emergency revascularization) had occurred in 11% of patients in the restrictive group and 14% in the liberal group. Although no statistically significant difference was found between the two groups, the restrictive group trended toward superiority.

COMMENT

These findings are consistent with studies of other patient populations and suggest that a restrictive transfusion strategy is noninferior to a liberal strategy in patients with acute MI and anemia. Given the known advantages of a restrictive strategy (e.g., lower consumption of blood resources, fewer adverse effects from transfusion, cost savings), the cutoff for transfusion in patients with acute MI should be Hb \leq 8 g/dL. — **Andrew S. Parsons, MD, MPH**

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Ducrocq G et al. Effect of a restrictive vs liberal blood transfusion strategy on major cardiovascular events among patients with acute myocardial infarction and anemia: The REALITY randomized clinical trial. JAMA 2021 Feb 9; 325:552. (<https://doi.org/10.1001/jama.2021.0135>)