Patient Blood Management: transfusion appropriateness in the post-operative period

Di Bartolomeo E, Merolle L, Marraccini C, Canovi L, Berni P, Guberti M, Mazzi A, Bonini A, Romano N, Magnani A, Pertinhez TA, Baricchi R. *Blood Transfus*. 2019 Nov;17(6):459-464.

BACKGROUND

Within the context of Patient Blood Management (PBM) policy for the peri-operative period, the transfusion medicine unit of our institution adopted a series of strategies to support and enhance red blood cell (RBC) transfusion best practices. This study aimed to evaluate the appropriateness of RBC transfusion therapy in the post-operative period, before and after starting a multifactorial PBM policy.

MATERIALS AND METHODS

A 2-phase observational study was conducted on patients who underwent major surgery. The study was designed as follows: 3 months of preliminary audit, followed by multifactorial PBM policy, and a final audit. The policy comprised seminars, teaching lessons, periodic consultations and the insertion of Points of Care. RBC transfusion appropriateness was evaluated in both audits.

RESULTS

The preliminary audit, performed on 168 patients, showed that 37.7% of the patients were appropriately transfused. The final audit, performed on 205 patients, indicated a significant increase of RBC transfusion appropriateness to 65.4%.

DISCUSSION

In our experience, our multifactorial PBM policy improved the RBC transfusion appropriateness in the post-operative period. We believe that our multifactorial PBM policy, which comprises the insertion of Points of Care, supported the healthcare workers in the transfusion decision-making process. This enhancement of transfusion appropriateness implies clinical and managerial advantages, such as reduced transfusion-related risks, optimisation of health care resources, and reduction in costs.