From the Editor

Guidelines

One of the goals of a society journal, such as the *Journal of Extracorporeal Technology (JECT)*, is to provide members/perfusionists with information that will help them improve their practice. In this issue, there are four original articles, two case studies, and an important letter to the editor. All of these articles provide information and insights that can be used to improve perfusion practice. This issue also includes a report by Likosky, Dickenson, and Paugh on two blood management practices (acute normovolemic hemodilution [ANH] and retrograde autologous priming [RAP]) at 27 different medical centers who participate in the perfusion measures and outcomes (PERForm) registry. The report was followed up with a literature review of the evidence that supports the use of ANH and RAP to reduce red blood cell (RBC) transfusions in cardiac surgery (1). This report, as others before it, demonstrates the variability in blood management practices that continues to exist between cardiac surgery programs, despite the mounting evidence of the adverse effects of RBC transfusions on morbidity and mortality of patients. It makes one wonder why this is the case. If you examine the literature regarding blood management, you will find that this is not due to a lack of studies. Despite the number of studies, the science underlying blood conservation is still not well understood, including the role of intra-operative management strategies. The science underlying blood management and conservation involves most, if not all, of the systems required to maintain homeostasis. Add to that the complex systems involved in conducting, writing, and publishing the research. Developing an understanding requires asking the right questions, developing and applying the right methods to answer those “right questions,” using the right methods to analyze the results, and then explaining what it all means.

Journals, such as JECT, are an important conduit for the dissemination of research findings to its community of readers. An important component for effective dissemination of information is the quality of the reporting. The quality of a research report requires a clear statement of the research question examined and why, sufficient detail of what was done (Materials and Methods), details of what was found (Results), and what the findings mean (Discussion) including providing context (Existing Relevant Research) that will allow the readers to judge the relevance of the research (2). Without quality reporting, the ability to assess the strengths and weaknesses of studies in relationship to the current knowledge base is lost, as is the level of understanding required to see the relevance of the results to clinical practice. Turns out, the quality of reporting is a serious problem in the medical literature, including journals with high impact numbers (2–4). Fortunately, since 1996, there has been a movement to improve the quality of reporting of medical research through the development of reporting guidelines for a number of different study types and specialties. The EQUATOR (Enhancing the QUAlity and Transparency Of health Research; http://www.equator-network.org/) network currently has 325 published guidelines for a variety of study types and topics in medical and clinical research. The adoption and application of these guidelines provide an initial first step to improving the quality of reporting and make it easier for clinicians to assess the validity of research findings and to perhaps implement the results into practice (4). In the coming year, JECT will begin to integrate a number of the EQUATOR guidelines into the editorial process to provide a tool for authors, editors, and peer reviewers to use to ensure the quality of the published articles.

The lack of quality reporting in peer-reviewed journals is also prevalent in the area of blood management, which has made it difficult for clinicians to readily identify the optimal cardiopulmonary bypass (CPB) practices for their patients and has made the transition to better practices sluggish. A search through the EQUATOR network guidelines demonstrates a lack of reporting guidelines for studies related to blood conservation or blood management. Thus, in addition to the adoption and implementation of the
EQUATOR guidelines, *JECT* will also be adopting and implementing a guideline based on the consensus statement for CPB-related contributions to RBC transfusions in adult patients (5). It is our hope that other journals will additionally begin adopting these consensus criteria and guidelines. Despite being a small, specialized journal, *JECT* has the potential to become a leader in establishing the minimal criteria for CPB-related practices that influence RBC transfusions and make an even greater impact in the blood management.

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### REFERENCES