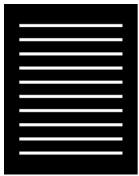

Preface



WELCOME TO THE 4TH EDITION of *Transfusion Therapy: Clinical Principles and Practice!* Thanks to the vision and efforts of Dr. Paul Mintz, the editor of all three previous editions, this book has been an

excellent resource to so many people. We have been humbled by the endorsement and support of Dr. Mintz as we prepared this new edition.

As Dr. Mintz states in the third edition, “Clinical practice is the application of fundamental knowledge and sound judgment to the unique circumstances of an individual patient at a particular moment. No set of inflexible rules can be crafted to apply to the constellation of variables that are present when a physician is confronted with a therapeutic decision. However, guidance can be offered.” As he pointed out, we still do not know a lot of what we would like to know in order to decide if a blood transfusion is necessary or not.

In the preface to the third edition, Dr. Mintz also wrote: “It is tempting to wonder what will (and will not) be included in the fourth edition of this text. How much better will we understand whether patient outcomes are affected by the storage age of RBC units? Will pathogen-reduced RBCs become clinically available? Will alternative oxygen therapeutics finally enter into practice? Will red cells cultivated in vitro be well on their way to therapeutic use? Will lyophilized platelets and/or plasma become a clinical option?”

We hope that you will be satisfied with the discussion of the evidence to answer the first

question dealing with the age of RBCs and patient outcomes. Although there have been several randomized controlled trials in different clinical scenarios (critical care, cardiovascular surgery, etc), many questions remain. We still don’t have high-level evidence for the role of RBC storage in massively transfused patients, for example. Pathogen-reduced RBCs, alternative oxygen therapeutics, in-vitro cultivated red cells, and lyophilized platelets and/or plasma are not yet in clinical practice, although progress has been made.

The aim of this edition is the same as that of the previous ones, but reflective of the many changes in the transfusion landscape during the intervening years. For this edition, we grouped the chapters in three different sections: Blood Products and Derivatives, Transfusion Medicine Practice, and Management Aspects of Transfusion Practice. You will recognize several chapters as having the same title as in previous editions, but with fresh content. Other chapters were combined into a single new one, while some chapters are new from start to finish.

Two of the new chapters were added to address dilemmas encountered with increasing frequency by transfusion medicine professionals: “Transfusion Support and Hemostatic Monitoring in Patients Connected to Extracorporeal Devices” and “Special Transfusion-Related Considerations in Jehovah’s Witness Patients.” Two other new chapters address hemostatic disorders, which play an essential role in how we employ transfusion therapy on a daily basis. The first discusses normal hemostasis and how it is assessed

in the clinical laboratory or at the bedside. The second addresses specific hemostatic disorders from pathophysiology to treatment.

Patient blood management (PBM) has continued to play a key role in transfusion practice. Although some of its principles are included in the “RBC Transfusion Therapy in Anemia” chapter, the “Patient Blood Management” chapter provides an in-depth view of the field and several useful initiatives and metrics to ensure a successful PBM program.

We asked all authors to include as many evidence-based recommendations as possible, recognizing that much is still elusive.

Our sincere hope is that this new edition will help clinicians who are taking care of patients who might need a transfusion, as well as for transfusion medicine professionals who are pro-

viding primary and consultative care in this ever-evolving field.

Our vision for this edition would not have been possible without the efforts of the chapter authors. Not only did they share their significant expertise, but they did so on a very tight schedule. We appreciate every one of them. We also benefited from the team of AABB staff, who matched the dedication of the authors: Victoria Barthelme, Jennifer Boyer, Nina Hutchinson, and Laurie Munk from AABB Press, and several others who reviewed and clarified key passages. We hope you find this edition as helpful as we planned it to be.

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