

PREFACE

The third edition of the *Perioperative Blood Management: A Physician's Handbook* is a joint effort by AABB and the Society for the Advancement of Blood Management (SABM). This *Handbook* describes ways to use blood wisely, conserve blood, and in many instances, ways to avoid blood use entirely.

If the book has a mission statement, it would be to emphasize that optimal patient care should utilize a multimodal approach to blood management, rather than a single approach. This handbook is to be a ready resource for surgeons, anesthesiologists, perfusionists, transfusion specialists, clinicians, nurses, and other members of the health-care team who provide care to patients undergoing surgery.

Similar to the second edition of the handbook, the third edition of this handbook is divided into seven sections. New updates, deletions where appropriate, and a few new subsections have been added and the appendices edited. The introductory section lays the foundation for the sections that follow. It briefly reviews the risks associated with allogeneic blood transfusion and the quality standards promulgated to improve the use of perioperative transfusion. This section also introduces the strategies involved in preoperative, intraoperative, and postoperative blood conservation.

The section on Preoperative Assessment and Management focuses on two principles of therapy: maintaining optimal hemoglobin levels and addressing coagulation abnormalities. Some of the key concepts covered in this section include use of erythropoietin and iron therapies, effects of the patient's use of herbal supplements, and the need to avoid the use of anticoagulants such as warfarin, heparin, nonsteroidal anti-inflammatory drugs, and antiplatelet medications when appropriate.

The Intraoperative Blood Management section discusses with the intraoperative techniques of acute normovolemic hemodilution and intraoperative blood recovery. Details are given on patient selection, unit collection and processing, readministration, contraindications, and complications of these closely related techniques.

Adjunctive Pharmacologic Therapies includes recommendations on recombinant Factor VIIa, aprotinin, tranexamic acid, desmopressin, and epsilon aminocaproic acid. The use of these agents is rapidly evolving. New to this section is a discussion of fibrinogen concentrates and prothrombin complex concentrates. Finally, a short discussion of topical therapies is provided. The section on Point-of-Care Testing highlights the benefits of hemoglobin level and coagulation testing in the operating suite. It describes in some detail the tests and equipment that can provide immediate feedback on hemostasis, thus directing the use of all other perioperative techniques to improve patient outcome.

The Postoperative Blood Management section discusses the collection and readministration of postoperatively shed blood. It also provides guidance on anemia management in the intensive care unit and into the postoperative period.

The final section, Management of Special Patient Populations, provides a perspective on how different surgical environments and conditions need to be approached with different tools. This section covers liver, cardiac, obstetric, pediatric, oncology, and the Jehovah's Witness patient. The *Handbook* concludes with two appendices. One gives readers a brief summary of the organizations that address perioperative blood management issues, identifies some of the key resources the groups provide, and lists key contact information for follow-up and networking. The other is a helpful chart of pharmacologic agents that are used to achieve hemostasis. It describes the drug action, clinical indications, dosage, side effects, and useful comments.

In keeping with the handbook format, the editors have condensed a wealth of information into a small space. No attempts were made to provide exhaustive coverage of any topic or spe-

cific recipes for treatment. The AABB and SABM's full textbook, *Blood Management: Options for Better Patient Care*, provides more information than what is referenced here.

The hard work of the contributing editors to this second edition is deeply appreciated. It has been a rewarding experience to participate in the alliance between AABB and SABM to help keep practitioners up to date in this fascinating area of patient care. Special thanks are due to Laurie Munk and Jennifer Boyer for their relentless assistance in producing this valuable resource.

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