thrombotic microangiopathy. Clinically useful information concerning nonblood products and transfusion therapy for bleeding disorders is also provided. The remaining portion of the book reviews the thrombotic diseases including deep venous thrombosis and pulmonary embolism; thrombosis in unusual sites; hypercoagulable states; and treatment approaches to cardiac disease, stroke, and peripheral vascular disease. Separate chapters are dedicated to treatment modalities including heparin, warfarin, antiplatelet agents, and thrombolytic therapy. The last two chapters cover bleeding and thrombosis in cancer patients and in pregnancy.

The Oxford Textbook of Critical Care, 1384 pages; $198.50. Published by Oxford University Press in Oxford, United Kingdom in 1999, it is a multiauthored compendium on the subject of intensive care medicine both as a reference text and especially as a text from which to draw teaching support for intensive care medicine. This text’s utility is further enhanced by its availability on CD-ROM. I feel that it is in the best tradition of the Oxford Medical Publications that this text assumes a worthy place.

As a handbook, Hemostasis and Thrombosis provides essential clinical background on this group of diseases. Especially useful are the chapters on treatment modalities, which include up-to-date information on many of the new antithrombotic and anticoagulation therapies. The chapters are well organized and deliver the information in a concise fashion. Recommended readings are also provided at the end of each chapter for more extensive review. In this regard, Hemostasis and Thrombosis should be considered a practical, “quick” reference for those seeking additional information on these disorders; it is certainly not a comprehensive source document.

Clearly, an understanding of bleeding and coagulation disorders has become essential for health care providers involved in the management of patients with vascular disease. This interrelationship is exemplified by the many antithrombotic medications currently available for the management of cardiovascular disease, the different options for treating nonsurgical-related bleeding complications, the use of thrombolysis for acute thrombotic problems, and the role of hypercoagulable states in failed vascular interventional and surgical procedures, to name a few. Hemostasis and Thrombosis provides a practical starting point for those who wish to learn more about this area of medicine.

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Oxford textbook of critical care
Andrew Webb, Marc Shapiro, Mervyn Singer, Peter Suter; Oxford; 1999; Oxford Medical Publications; 1384 pages; $198.50.

The Oxford Textbook of Critical Care, edited by Andrew R. Webb, Marc J. Shapiro, Mervyn Singer, and Peter M. Suter, is a comprehensive and ambitious addition to the burgeoning critical care literature. It is an ambitious text of 1400 pages with 450 authors from 20 countries. In spite of its size it is a concise text. It benefits from the decision by the editors to organize the book into 18 major topics with specialized short monographs from experts in the field. This is a good decision because it renders complex concepts far more accessible than critical care texts that have lengthy chapters. Particularly strong sections include the Respiratory System; the Neurological System; the Metabolic and Endocrine Systems; Trauma, Burns and Physical Disorders; and Infection and Systemic Inflammation. In addition, there are well-focused sections that deal with perioperative problems and the management of the critical care department with very useful monographs on the most common scoring systems used in Intensive Care Medicine.

Each monograph begins with a highlighted “Key messages” containing each author’s most important points that help to focus the reader. In general, the monographs themselves are well written and contain illustrations, tables, and charts that are clear and help to enhance the discussion. A short bibliography at the end of each monograph offers critical references. Overall, this text has an excellent basic science component in each monograph that moves smoothly into common pathophysiologic derangements, specific disorders, pharmacologic support, and therapeutic strategy. Future directions and conclusions are offered where applicable. Overall, this text is an ambitious attempt to add a useful and concise approach to the complicated and complex care of the critically ill patient. This text is especially useful for medical students and residents of all disciplines who rotate in the surgical and medical intensive care units. Additionally, it is highly recommended as a text for practicing physicians and surgeons who have patients that require intensive care unit care and who have an interest in this rapidly expanding field. Vascular surgeons will find many monographs in this text that will help care for the patients with vascular disease. Finally, this is a useful text for the specialist in intensive care medicine both as a reference text and especially as a text from which to draw teaching support for intensive care medicine. This text’s utility is further enhanced by its availability on CD-ROM. I feel that it is in the best tradition of the Oxford Medical Publications that this text assumes a worthy place.

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Tissue engineering of vascular prosthetic grafts
Peter Zilla, Howard Greisler; Austin; 1999; R. G. Landes; 621 pages.

This book is coedited by two well-known vascular cell biologists, Peter Zilla and Howard Greisler. Published in 1999, it is a multiauthored compendium on the subject of tissue engineering of vascular prostheses. If the reader/investigator is of the mind that tissue engineering is the way of the future for the genesis of vascular prosthesis (as this author is), then this book is an important acquisition. Its 616 pages contain multiple chapters of reasonably short length by many well-recognized authorities in the field.
It is organized into three (actually four) parts; (1) Bio-
Inert Prostheses: Insufficient Healing; (2) Biolized
Prostheses: Surface Healing; (3) Biointeractive Prostheses:
Complete Healing—Biologic Components; and (4)
Biointeractive Prostheses: Complete Healing—Engi-
eering Components.

This organization tells really the whole story. The first
section is made up of two rather long chapters on healing
of conventional grafts and on vascular wall mechanical
properties or compliance. Both of these are particularly
good overviews of the problems involved with the current
prosthesis and are well worth the reading all by them-
selves. The second part contains a well-written and
detailed discourse on surface healing and microendothelial
and macroendothelial cell transplantation. The last two
parts address most, but not all, of the various issues
involved in the challenge of a tissue-engineered prosthesis.

Overall, the book is quite easy to read. The illustra-
tions are of excellent quality, and the bibliography is
extensive. In that last capacity it is itself an excellent
resource. Even if one is not interested in the specific sub-
ject of a tissue-engineered graft, this book also serves as an
excellent review of many aspects of vascular wall cell biol-
ogy, such as cytokines, inflammatory mediators, matrix
biochemistry, angiogenesis, growth factors, adhesion mol-
ecules, and signal transduction mechanisms.

The balance perhaps is a little heavy on endothelial cell
biology and sparse on mechanical force. It is disappointing
that there is not a greater representation of genetic modi-
fications of various cells. Finally, the book unfortunately
lacks an overview section of where the field stands at the
present time.

These criticisms are minor relative to the overall value
of this text. Of course, a book reviewer cannot read every
word of a book and still generate a timely review. How-
ever, this reviewer intends to go back and read it
again from cover to cover, as time permits. I like this book
and recommend it for anyone who is interested in the cel-
lar biology of vascular structure and specifically in tissue
engineering replication of the same.

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Tissue engineering is an interesting alternative approach for vascular graft fabrication. Methods. We briefly overviewed the development of tissue-engineered vascular substitutes including endothelialized biohybrid grafts, collagen and fibrin-based scaffolds, decellularized scaffolds, cell self-assembly approaches, and biodegradable constructs based on synthetic polymers. Results. Significant advances have been made over the past decades in the development of tissue-engineered conduits. Brewster DC. Prosthetic grafts. In: Rutherford RB, editor. Vascular surgery.