



## Book Review

### Antithrombotic Therapy, 2<sup>nd</sup> Edition

By Richard C. Becker, MD, Dan J. Fintel, MD, and David Green, MD, PhD, Caddo, OK Professional Communications, Inc., 2002; 352 pp; \$24.95

The adage “good things come in small packages” cannot be more aptly applied than to this concise, clinically oriented handbook entitled *Antithrombotic Therapy*. The field of antithrombotic therapy is undergoing revolutionary changes at present, and oftentimes medical applications lag far behind evidence-based guidelines. It is a difficult task at best to synthesize and summarize, in a clinically meaningful way, the explosion of information on the pathophysiology of thrombosis, the ongoing clinical trials of novel antithrombotic, antiplatelet, and fibrinolytic agents, and the more complex diagnostic and management paradigms of arterial and venous thromboembolic disease. Becker, Fintel, and Green have accomplished this in the latest edition of their text, which follows the same overall topics, well-organized sections, quick tab indexing, and extensive reference list as the first edition but adds new information to nearly all of the chapters, making it up-to-date and clinically relevant.

*Antithrombotic Therapy* begins with a chapter reviewing the pathophysiology and regulation of blood coagulation and thrombin activity, with helpful figures illustrating the various pathways. The chapter on antithrombotic agents, a rapidly evolving field with multiple novel agents undergoing phase 2 and 3 clinical trials, has expanded to include a section on the newly approved synthetic factor Xa inhibitor pentasaccharide, as well as a focused discussion on future anticoagulants that are under development, such as oral heparin and the oral direct thrombin inhibitor ximelagatran. Furthermore, the section on low-molecular-weight heparin (LMWH) has expanded to include tinzaparin as the newly approved LMWH for venous thromboembolic disease treatment. The chapter on thrombolytic agents (appropriately renamed *fibrinolytic agents*) includes information on the latest cardiology clinical trials, such as the Global Use of Strategies to Open occluded arteries (GUSTO)-V and the Assessment of Safety and Efficacy of a New Thrombolytic agent (ASSENT)-3 trials. These trials assessed the efficacy and safety of the third generation fibrinolytic agents, especially in combination with the potent GPIIb/IIIa receptor antagonists as antiplatelet therapy. New information on outcomes concerning the safety and efficacy of platelet inhibition with clopidogrel in the setting of acute coronary syndromes (ACS) and percutaneous coronary interventions are presented *vis-à-vis* the Clopidogrel in Unstable Angina to Prevent Recurrent Events (CURE), PCI-CURE, and Do Tirofiban and ReoPro Give Similar Efficacy Trial (TARGET) trials. The rapidly evolving data concerning GPIIb/IIIa receptor antagonists, including new data from the GUSTO-IV trial in ACS, the GUSTO-V, the Abciximab Before Direct Angioplasty and Stenting in Myocardial Infarction Regarding Acute and Long Term Follow-up (ADMIRAL), and the European/Australian Stroke Prevention in Reversible Ischemia Trial (ESPRIT) studies, as well as pharmacodynamic results from the Global Out-

comes in Lung Diseases (GOLD) study are presented. More importantly, a new section emphasizing a practical and simplified approach to GPIIb/IIIa antagonist therapy has been added.

The cornerstone of this manual remains the chapter on the management of arterial and venous thromboembolic disorders and clinical syndromes warranting anticoagulant therapy. The tables for evaluation and the flowcharts used for management follow an intuitive, clinically oriented format. The medical therapy section for ACS has expanded to include the use of bivalirudin and lepirudin in situations in which heparin-induced thrombocytopenia (HIT) is suspected. The section on the management of acute arterial insufficiency now includes the expanded use of clopidogrel, especially in combination with aspirin therapy in patients with disease in more than one vascular bed. In terms of the management of patients with native and prosthetic valvular heart disease, more attention is paid to the evolving concepts of thromboembolic and bleeding risk factors, especially with regard to the use of heparins (either unfractionated heparin or LMWH) as “bridge” therapy during the interruption of oral anticoagulant therapy, such as in surgical procedures.

The chapter on the management of venous thromboembolic disease has been extensively updated from the first edition. In terms of diagnosis, the recently published algorithms of Bounameaux et al, incorporating initial screening using enzyme-linked immunosorbent assay plasma d-dimer to rule out disease, has been added, although the external validity of this approach in a US health-care system has yet to be determined. Management approaches, including duration of therapy, all reflect the latest recommendations from the Sixth American College of Chest Physicians Consensus Conference. Last, the section on complications of anticoagulant therapy includes the latest guidelines from the American Society of Regional Anesthesia and Pain Medicine for the use of anticoagulant agents in patients undergoing regional anesthesia for surgical procedures. The section on HIT management also has been expanded to include the newly approved agent argatroban.

The second edition of *Antithrombotic Therapy* is sturdily bound, and for good reason: it is meant to be used on a daily basis. It should be an invaluable addition to any medical student's or house officer's pocket manual armamentarium and also would be equally effective as a reference guide for clinicians and experienced investigators who manage and study patients with thromboembolic disease.

Alex C. Spyropoulos, MD  
Albuquerque, NM