With an aging population owing to our longer life span, peripheral arterial disease will become more common than its already high prevalence. It has usually been assigned a less important role in the education of the lay public and physicians, in contrast to coronary artery and cerebrovascular disease. The importance of peripheral arterial disease, symptomatic and asymptomatic, to the practicing physician and cardiologist is that it predicts disease in other vascular beds—serving as a prognostic factor for myocardial infarction, stroke, and mortality. Furthermore, there is impaired functional capacity and severe disability, particularly in those with critical limb ischemia.

The diagnosis of peripheral arterial disease is often obvious from the history and physical examination, but with the development of noninvasive techniques, especially the Doppler flowmeter, the diagnosis can easily be documented in both symptomatic and asymptomatic patients by all physicians. There are exciting new therapeutic modalities including gene therapy, endovascular interventions, and new pharmaceutical agents.

In Peripheral Arterial Disease: Diagnosis and Treatment, we acquaint physicians with all aspects of peripheral arterial disease. Because of the limitations of medical therapy, there is now a special emphasis on prevention of peripheral arterial disease and a special emphasis on risk factors and their treatment. Risks factors are considered from the point of view of the pathophysiologist (Chapter 1), epidemiologist (Chapter 2), and vascular specialist (Chapter 9). The pathogenesis of arteriosclerosis is presented first, followed by a comprehensive treatise on the epidemiology and natural history of the disease. The chapter on the clinical evaluation of intermittent claudication contains the very important differential diagnosis section. A combined chapter on hemodynamics and vascular laboratory testing gives the reader insight into the physiological and pathophysiological basis of the available diagnostic tests. The role of angiography, including newer noninvasive modalities, is discussed.

Regarding treatment, a chapter on risk factors and antiplatelet therapy is especially timely, with a focus on the prevention of myocardial infarctions, strokes, and mortality in peripheral arterial disease patients. Exercise rehabilitation is covered in depth, for it is one of the most effective treatments for peripheral arterial disease. Pharmacotherapy, including new agents for intermittent claudication, and endovascular interventions are the subjects of separate chapters. The intriguing, emerging field of angiogenesis is introduced with appropriate caution. There is a detailed discussion of the time-honored surgical approach to revascularization. For the consultant, a chapter follows on the preoperative evaluation and perioperative management of the vascular disease patient.

There are separate chapters discussing such special problems as peripheral arterial disease in women, management of the diabetic foot, and large vessel vasculitis. Although the concentration is on arteriosclerosis obliterans, two less common causes of peripheral artery disease, arterial embolus and thromboangiitis obliterans, are worthy of separate chapters. Finally a common problem that is often encountered by clinicians involved with catheter-based interventions, atheroembolism, is discussed.

Preface
By providing a comprehensive overview and detailed accounting of all aspects of peripheral arterial obstructive disease, we hope to empower the clinician with the skills and knowledge to diagnose and treat this important and often overlooked disorder.

Jay D. Coffman, MD
Robert T. Eberhardt, MD