Contributors
Preface
Acknowledgments
A Surgeon’s Appraisal of the Future of Percutaneous Revascularization Techniques p. 1
Noninvasive Evaluation of Peripheral Vascular Disease p. 5
Angiographic Evaluation of Peripheral Vascular Disease p. 15
Pharmacologic Manipulation in Transluminal Angioplasty of Peripheral Vascular Disease: Spasm Control p. 20
Transluminal Angioplasty of Peripheral Vascular Disease: Aggregation Inhibitors p. 23
Guide Wire Technology p. 29
Peripheral Angioplasty Balloon Technology p. 36
Intravascular Ultrasound p. 41
Clinical Applications of Angioscopy in Cardiovascular Disease p. 45
Transluminal Angioplasty of the Aorta and Iliac Arteries p. 52
Transluminal Angioplasty of the Popliteal and Tibial-Peroneal Arteries p. 59
Vasa Vasorum Changes Following Angioplasty and Stenting p. 64
Biochemistry and Pharmacology of Fibrinolytic Therapy p. 70
Low-Dose Thrombolysis: Techniques, Complications, and Results p. 76
Pulsed Spray Pharmacomechanical Thrombolysis p. 83
Thrombolysis p. 88
Percutaneous Aspiration Thromboembolectomy p. 97
Percutaneous Thrombectomy p. 106
Simpson’s Atherectomy Catheter: Technical Description, Operating Mechanism p. 118
Percutaneous Atherectomy of the Iliac Arteries p. 125
Femoral Artery Atherectomy p. 133
Use of Simpson’s Atherocath in the Treatment of Arterial Obstruction p. 141
Percutaneous Atherectomy of Obstructive Postangioplasty Intimal Flaps p. 147
Recanalization of Chronic Occlusions: Low-Speed Rotational Angioplasty p. 153
Kensey Catheter: Technical Description p. 159
Percutaneous Atherectomy: A New Rotary Atherectomy System p. 166
Percutaneous Atherectomy: Transluminal Endarterectomy Catheter and the Atherolytic Reperfusilon Wire Device p. 173
The Auth Rotablator: Percutaneous Transluminal Rotational Ablation in Peripheral Vascular Disease p. 187
An Overview of Laser Angioplasty p. 204
Laser-Tissue Interaction p. 223
Mechanisms of Laser Recanalization p. 232
Thermo-Optical Laser Recanalization of Totally Occluded Peripheral Arteries p. 245
Tibioperoneal and Popliteal Sole Hot Tip Laser Thermal Angioplasty p. 253
Sapphire Probe Laser-Assisted Angioplasty p. 260
High-Power Argon Laser Delivery in Canine Coronary Arteries p. 267