

# Contents

- 1** The challenge of when to treat in glaucoma, 1  
**Harry A. Quigley**
- 2** Problems and prognosis of the developmental glaucomas, 10  
**Robert N. Shaffer**
- 3** New concepts in angle-closure glaucoma, 15  
**David G. Campbell and Angela Vela**
- 4** The glaucomas and extracapsular cataract surgery with posterior chamber lens implantation, 27  
**Richard J. Simmons, James A. Savage, John V. Thomas, and C. Davis Belcher III**
- 5** Current applications of the dye laser, 55  
**Francis A. L'Esperance, Jr.**
- 6** Ophthalmic laser surgery: principles, technology, and technique, 81  
**Martin A. Mainster**
- 7** Pigmentary glaucoma, 102  
**David G. Campbell and John W. Boys-Smith**
- 8** The pathogenesis of optic nerve damage in glaucoma, 111  
**Harry A. Quigley**
- 9** Nerve fiber loss and disparity of disc and field changes in glaucoma, 129  
**Robert N. Shaffer**
- 10** Complications of laser trabeculoplasty, 134  
**James B. Wise**

**xii**    *Contents*

- 11** Laser treatment of macular disease: patient and laser selection, 140  
**Robert C. Watzke**
- 12** Transscleral laser cyclocoagulation, 148  
**Hugh Beckman**
- 13** Usual and unusual uses of the laser in glaucoma, 154  
**Richard J. Simmons, James A. Savage, C. Davis Belcher III, and John V. Thomas**
- 14** Laser iridotomy, 177  
**Hugh Beckman**
- 15** New laser systems and their potential clinical usefulness, 182  
**Francis A. L'Esperance, Jr.**
- 16** Technical considerations in laser trabeculoplasty, 210  
**James B. Wise**
- 17** Laser treatment of macular disease: procedure and follow-up, 215  
**Robert C. Watzke**
- 18** Unilateral shallow anterior chambers and glaucoma, 219  
**Robert N. Shaffer**
- 19** CO<sub>2</sub> laser, 226  
**Hugh Beckman**
- 20** Current status of ophthalmic photovaporization therapy, 231  
**Francis A. L'Esperance, Jr.**
- 21** Laser treatment of macular disease: recurrence of subretinal neovascular membranes after treatment, 256  
**Robert C. Watzke**
- 22** The future of glaucoma filtering operations, 263  
**Harry A. Quigley**
- 23** Special features and modifications of laser trabeculoplasty: where are we today? 268  
**Richard J. Simmons, John V. Thomas, James A. Savage, and C. Davis Belcher III**

**24** Chronic open-angle glaucoma: new findings and possible new treatments, 281

**David G. Campbell, John W. Boys-Smith, Wendell D. Woods, Nancy Tanchel, John M. Ruderman, Angela Vela, and Donald G. Aiken**

**25** Laser trabeculoplasty before and after aphakia and pseudophakia, 286

**James B. Wise**

**Round table discussions**

Problem cases in angle closure, 293

**David G. Campbell**

Glaucoma and cataract, 298

**Richard J. Simmons**

Problem cases, 306

**Robert N. Shaffer**

Medical therapy of glaucoma, 315

**Harry A. Quigley**

Applications of the pulsed neodymium:YAG laser, 325

**Francis A. L'Esperance, Jr.**