
CONTENTS

Preface.....	v
Contributors	xiii

Part I Living with Diabetic Retinopathy

1 Living with Diabetic Retinopathy: The Patient's View	3
<i>Heather Stuckey</i>	

Part II How Is Diabetic Retinopathy Detected?

2 Diabetic Retinopathy Screening: Progress or Lack of Progress	17
<i>Peter Scanlon</i>	
3 Functional/Neural Mapping Discoveries in the Diabetic Retina: Advancing Clinical Care with the Multifocal ERG.....	31
<i>Anthony J. Adams and Marcus A. Bearnse Jr.</i>	

Part III How Does Diabetes Affect the Eye?

4 Corneal Diabetic Neuropathy	45
<i>Edoardo Midena</i>	
5 Clinical Phenotypes of Diabetic Retinopathy	53
<i>José Cunha-Vaz, Rui Bernardes, and Conceição Lobo</i>	
6 Visual Psychophysics in Diabetic Retinopathy	69
<i>Edoardo Midena and Stela Vujosevic</i>	
7 Mechanisms of Blood–Retinal Barrier Breakdown in Diabetic Retinopathy	105
<i>Ali Hafezi-Moghadam</i>	
8 Molecular Regulation of Endothelial Cell Tight Junctions and the Blood-Retinal Barrier.....	123
<i>E. Aaron Runkle, Paul M. Titchenell, and David A. Antonetti</i>	
9 Capillary Degeneration in Diabetic Retinopathy	143
<i>Timothy S. Kern</i>	
10 Proteases in Diabetic Retinopathy	157
<i>Sampathkumar Rangasamy, Paul McGuire, and Arup Das</i>	
11 Proteomics in the Vitreous of Diabetic Retinopathy Patients.....	173
<i>Edward P. Feener</i>	
12 Neurodegeneration in Diabetic Retinopathy.....	189
<i>Alistair J. Barber, William F. Robinson, and Gregory R. Jackson</i>	

13	Glucose-Induced Cellular Signaling in Diabetic Retinopathy.....	211
	<i>Zia A. Khan and Subrata Chakrabarti</i>	
14	IGFBP-3 as a Regulator of the Growth-Hormone/Insulin-Like Growth Factor Pathway in Proliferative Retinopathies	233
	<i>Andreas Stahl, Ann Hellstrom, Chatarina Lofqvist, and Lois Smith</i>	
15	Neurotrophic Factors in Diabetic Retinopathy	245
	<i>Anne R. Murray and Jian-xing Ma</i>	
16	The Role of CTGF in Diabetic Retinopathy	261
	<i>R.J. van Geest, E.J. Kuiper, I. Klaassen, C.J.F. van Noorden, and R.O. Schlingemann</i>	
 Part IV How Can Vision Loss Be Limited: Experimental Therapies		
17	Ranibizumab and Other VEGF Antagonists for Diabetic Macular Edema.....	289
	<i>Ben J. Kim, Diana V. Do, and Quan Dong Nguyen</i>	
18	Neurodegeneration, Neuropeptides, and Diabetic Retinopathy.....	307
	<i>Cristina Hernández, Marta Villarroel, and Rafael Simó</i>	
19	Glial Cell–Derived Cytokines and Vascular Integrity in Diabetic Retinopathy	325
	<i>Shuichiro Inatomi, Hiroshi Ohguro, Nami Nishikiori, and Norimasa Sawada</i>	
20	Impact of Islet Cell Transplantation on Diabetic Retinopathy in Type 1 Diabetes	339
	<i>Iain S. Begg, Garth L. Warnock, and David M. Thompson</i>	
	Index	367

Visual Dysfunction in Diabetes

The Science of Patient Impairment and Health Care

Tombran-Tink, J.; Barnstable, C.J.; Gardner, Th.W. (Eds.)

2012, XV, 379 p., Hardcover

ISBN: 978-1-60761-149-3

A product of Humana Press