

Studies On Experimental Models

[DOWNLOAD HERE](#)

1;Preface;6 2;Contents;8 3;Contributors;12 4;Part I: Diabetes;22 4.1;Role of Oxidative Stress and Targeted Antioxidant Therapies in Experimental Models of Diabetic Complications;23 4.1.1;1 Introduction;24 4.1.2;2 Diabetes-Associated Atherosclerosis;25 4.1.2.1;2.1 Experimental Models of Diabetes-Associated Atherosclerosis with an Emphasis on Oxidative Stress;27 4.1.2.1.1;2.1.1 The GPx1 Knockout Mouse;27 4.1.2.1.1.1;Glutathione Peroxidase-1 and Its Role in the Antioxidant Pathway;27 4.1.2.1.1.2;GPx1 / Mice Fed High Fat Diets as a Model to Study Pro-atherogenic Mechanisms;29 4.1.2.1.1.3;ApoE/GPx1 Double-Knockout Mouse Model;29 4.1.2.1.1.4;Diabetic ApoE/GPx1 dKO Mice as a Model of Accelerated Diabetes-Associated Atherosclerosis;30 4.1.2.1.2;2.1.2 The NOX Knockout Mouse;31 4.1.2.1.3;2.1.3 The RAGE Knockout Mouse Model;33 4.1.3;3 Diabetic Nephropathy;34 4.1.3.1;3.1 Diabetic ApoE/GPx1 / dKO Mouse as a Model of DN;36 4.1.3.2;3.2 Experimental Models of NADPH Oxidase-Mediated Oxidative Stress in DN;36 4.1.4;4 Diabetic Cardiomyopathy;37 4.1.5;5 Targeted Antioxidant Therapies;40 4.1.5.1;5.1 The GPx1-Mimetic Ebselen;42 4.1.5.2;5.2 Ebselen in an Experimental Model of Diabetes-Associated Atherosclerosis;42 4.1.5.3;5.3 A Mechanistic Understanding of the Anti-atherogenic Action of Ebselen;43 4.1.5.4;5.4 Mitochondrially Targeted Antioxidants;44 4.1.5.5;5.5 NOX Inhibitors;45 4.1.6;6 Conclusions;47 4.1.7;References;48 4.2;Experimental Models of Oxidative Stress Related to Cardiovascular Diseases and Diabetes;59 4.2.1;1 Introduction;60 4.2.2;2 Animal Models of Cardiovascular Diseases;60 4.2.2.1;2.1 Rabbit Dietary-Induced Atherosclerosis;62 4.2.2.2;2.2 Murine Models of Atherosclerosis;64 4.2.2.3;2.3 Genetically Modified Animals;65 4.2.2.4;2.4 Other Experimental Models of Cardiovascular Diseases;66 4.2.3;3 Experimental Models of Diabetes;67 4.2.3.1;3.1 Streptozotocin and Alloxan Murine Diabetes Models;68 4.2.3.2;3.2 Neonatal Streptozotocin-Induced Diabetes;69 4.2.3.3;3.3 Streptozotocin-Spontaneously Hypertensive Rat;69 4.2.3.4;3.4 Fat-Fed/Streptozotocin-Induced Diabetic Rodents;69 4.2.3.5;3.5 Zucker Diabetic Fatty Rats;70 4.2.3.6;3.6 Genetically Engineered Diabetic Mice;71 4.2.3.7;3.6.1 Otsuka Long-Evans Tokushima Fatty Rats;72 4.2.3.8;3.6.2 Goto-Kakizaki Rats;72 4.2.3.9;3.6.3 db/db (C57BL/KsJ-db/db) Mice;73 4.2.3.10;3.6.4 ob/ob (C57BL/6J-ob/ob) Mice;74 4.2.4;References;75 5;Part II: Cardiovascular;81

5.1;Arachidonic Acid Metabolism and Lipid Peroxidation in Stroke: Alpha-Tocotrienol as a Unique
Therapeutic Agent;82 5.1.1;1 Introduction;82 5.1.2;2 Ischemic Stroke (87 of all stroke cases);83
5.1.2.1;2.1 Patterns of Oxidative Stress in Ischemic Stroke;84 5.1.2.2;2.2 Experimental Models of
Ischemic Stroke;85 5.1.3;3 Hemorrhagic Stroke (13 of all stroke cases);88 5.1.3.1;3.1 Patterns of
Oxidative Stress in Hemorrhagic Stroke;88 5.1.3.2;3.2 Experimental Models of Hemorrhagic Stroke;89
5.1.4;4 Brain Oxygen, Lipid Metabolism, and Oxidative Stress;90 5.1.4.1;4.1 Arachidonic Acid Metabolism
in Brain;90 5.1.4.2;4.2 Phospholipase A2;91 5.1.4.3;4.3 Nonenzymatic Oxidative Lipid Metabolism;92
5.1.4.4;4.4 Enzymatic Oxidative Lipid Metabolism;93 5.1.4.4.1;4.4.1 Cyclooxygenase;94 5.1.4.4.2;4.4.2
Lipoxygenases;95 5.1.4.4.3;4.4.3 Cytochrome P450;96 5.1.5;5 Management of Oxidative Stress in
Stroke;97 5.1.5.1;5.1 Therapeutic Window of Opportunity for Hyperbaric Oxygen Therapy in Acute
Ischemic Stroke;98 5.1.5.2;5.2 Neuroprotective Properties of Natural Vitamin E, Alpha-Tocotrienol;98
5.1.6;6 Conclusion;99 5.1.7;References;100 5.2;Assessment of Oxidative Stress in the Brain of
Spontaneously Hypertensive Rat and Stroke-Prone Spontaneously Hypertensive Rat Using by Electron
Spin Resonance Spectroscopy ;110 5.2.1;1 Introduction;111 5.2.2;2 L-Band ESR/Nitroxyl Spin Probe
Methods;112 5.2.3;3 SHR and SHRSP;113 5.2.4;4 Measurement of Oxidative Stress in SHR and SHRSP
Brain Using ESR;113 5.2.5;5 Clinic EAN/ISBN : 9781607619567 Publisher(s): Springer, Berlin, Springer
Science & Business Media Discussed keywords: Oxidative Stress Format: ePub/PDF Author(s): Basu,
Samar - Wiklund, Lars

[DOWNLOAD HERE](#)

Similar manuals:

[Studies On Experimental Models](#)