Table of Contents

Foreword	7
Introduction	11
SECTION A: DYSAUTONOMIAS	17
The "Automatic" Nervous System	
What is the Autonomic Nervous System?	21
What are the Parts of the Autonomic Nervous System?	32
How Does the Autonomic Nervous System Work?	42
What are the Chemical Messengers of the Autonomic	
Nervous System?	52
What are the Functions of the Different Parts of the	
Autonomic Nervous System?	37
Dysautonomias	
What are Dysautonomias?	59
In Dysautonomias, What Goes Wrong?	60
The "Mind-Body" Issue	63
When in Life Do Dysautonomias Occur?	69
How are Dysautonomias Classified?	72
In What Conditions is the Autonomic Nervous System	
Underactive?	75
What is Orthostatic Hypotension?	79
What is Orthostatic Intolerance?	87
Pure Autonomic Failure	94

Multiple System Atrophy	99
Parkinson's Disease with Orthostatic Hypotension	107
Postural Tachycardia Syndrome (POTS)	112
Neurocardiogenic Syncope	129
Tests for Dysautonomias	135
Physiological Tests	143
The Valsalva Maneuver	143
Forearm Blood Flow	147
Power Spectral Analysis of Heart Rate	
Variability	151
Tilt-Table Testing	153
Sweat Tests	155
The Cold Pressor Test	156
Neuropharmacologic Tests	157
QSART	157
Trimethaphan Infusion Test	160
Yohimbine Challenge Test	165
Clonidine Suppression Test	170
Isoproterenol Infusion Test	174
Neurochemical Tests	178
Plasma Norepinephrine Levels	178
Plasma Epinephrine (Adrenaline) Levels	
Plasma Levodopa and other Catechols	
Neuroimaging Tests	184
MIBG Scanning	185
6-[18F]Fluorodopamine PET Scanning	185

Treatments for Dysautonomias Non-Drug Treatments 189 Elevation of the Head of the Bed 190 Salt Intake 190 Meals **Compression Hose** 191 192 Coffee Temperature 192 Exercise 192 Pacemakers and Sinus Node Ablation 194 195 Neurosurgery Constipation or Urinary Retention 195 Water Drinking 196 **Drug Treatments** 197 Fludrocortisone (FlorinefTM) 197 199 **B-Adrenoceptor Blockers** Midodrine (ProamatineTM) 202 205 Clonidine Yohimbine 206 **Intravenous Saline** 208 209 Amphetamines Selective Serotonin Reuptake Inhibitors (SSRIs) 211 ProcritTM (Erythropoietin) 212 L-Dihydroxyphenylserine (L-DOPS) 212

Bethanecol (UrecholineTM)

215

SECTION B: LIVING WITH DYSAUTONOMIAS	217
Living with Dysautonomias	219
Finding and Working with a Physician	221
You and Your Doctor: A Working Relationship	223
Referral to an Autonomic Specialist	226
Research Facilities – Should I Participate in a	
Study?	227
Day by Day with Dysautonomia	231
Chronic Illnesses	231
Accepting Your Disorder	232
Modifying Your Life	233
Daily Life Tactics	235
When to Ask for Help	244
Social Activities	245
Attitude is Everything	246
Caregiving	251
Family Caregiving	251
Children as Caregivers	255
Spousal Caregiving by Men	256
Intimacy	257
You Are Not Alone	258
Support Groups	261
What is a Support Group?	262

Social Security and Disability	265
Children and Dysautonomia	275
Dyautonomias are "Invisible."	275
IDEA and Its Regulations	277
Glossary	285