

# **STROKE**

**VOLUME 1**

**Pathophysiology, Diagnosis, and Management**

Edited by

**HENRY J. M. BARNETT, O.C., BENNETT M. STEIN, M.D.**

**J. P. MOHR, M.D.**

**FRANK M. YATSU, M.D.**

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## Pathophysiology, Diagnosis, and Management

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Accurate indications, adverse reactions, and dosage schedules for drugs are provided in this book, but it is possible that they may change. The reader is urged to review the package information data of the manufacturers of the medications mentioned.

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# Preface

Over the past decade there has been a rapid explosion of the advancing diagnostic and research technologies on stroke and a burgeoning interest in interventional therapies which have reduced the occurrence and severity of stroke. As we elbow our way past failed treatments and abandon therapeutic nihilism, we in the field are optimistic that the unfolding investigations on stroke pathophysiology and treatment will result in a better outlook for various stroke syndromes.

These exciting advances in treatment and the absence of an encyclopedic work on the subject convinced the editors to put together a comprehensive work on stroke. *Stroke: Pathophysiology, Diagnosis, and Management* is broad in scope and detailed in presentation and is intended to address the needs of the internist, surgeon, neurological practitioner, and students of these disciplines. The book provides current information on stroke pathophysiology, diagnosis, and therapy in a single reference. The reader is not spared technical details but is introduced to these details in understandable terms presented in a readable style. Each of the five major sections—pathophysiology, diagnosis, clinical manifestations, medical therapy, and surgical therapy—is self-contained, although a certain degree of arbitrary separation of topics has been necessary to minimize redundancy.

We have organized the book to provide practical and ready access to the conventional approaches to stroke syndromes, but have also examined viable future options in stroke therapy and prevention. More importantly, we hope we have conveyed a sense of the excitement of stroke research, the enthusiasm for which is fueled by the certain knowledge that stroke occurrences can be further curtailed to an irreducible minimum.

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# Contents

## VOLUME 1

### I. Pathophysiology of Strokes

1. **Epidemiology** 3  
*John F. Kurtzke, M.D.*
2. **Epidemiology of Strokes in North America** 19  
*Philip A. Wolf, M.D., William B. Kannel, M.D., M.P.H., and Daniel L. McGee, Ph.D.*
3. **Epidemiology of Strokes in Europe** 31  
*Jørgen Marquardsen, M.D.*
4. **Atherogenesis and Stroke** 45  
*Frank M. Yatsu, M.D.*
5. **Experimental Models of Ischemic Stroke** 57  
*Gaetano F. Molinari, M.D.*
6. **Biochemistry and Pharmacology of Cerebral Ischemia** 75  
*K.M.A. Welch, M.D. and Gregory L. Barkley, M.D.*
7. **Cerebral Microcirculation in Stroke** 91  
*Hermes A. Kontos, M.D., Ph.D.*
8. **Clinical Rheology of Stroke and Hemodilution** 97  
*James H. Wood, M.D. and David B. Kee, Jr., M.D.*
9. **Cerebrospinal Fluid in Cerebrovascular Disorders** 109  
*Robert A. Fishman, M.D.*
10. **Brain Edema** 119  
*Robert A. Fishman, M.D.*
11. **Positron Emission Tomography in Cerebrovascular Disease** 127  
*William J. Powers, M.D. and Marcus E. Raichle, M.D.*

12.	<b>Arachidonic Acid Metabolism in Brain Blood Vessels: Implications for the Pathogenesis and Treatment of Cerebrovascular Diseases</b>	141
	<i>Kevin J. Kiwak, M.D., Shaun R. Coughlin, M.D., Ph.D., and Michael A. Moskowitz, M.D.</i>	
13.	<b>Nuclear Magnetic Resonance in Stroke</b>	165
	<i>Ferdinando S. Buonanno, M.D., Eric T. Fossel, Ph.D., and J. Philip Kistler, M.D.</i>	
<b>II. Diagnostic Studies for Stroke</b>		
14.	<b>Overview of Laboratory Studies</b>	183
	<i>J.P. Mohr, M.D.</i>	
15.	<b>CT Scanning</b>	189
	<i>Mario Savoiaro, M.D.</i>	
16.	<b>Cerebral Angiography</b>	221
	<i>Herbert I. Goldberg, M.D.</i>	
17.	<b>Digital Venous Angiography</b>	245
	<i>Meredith A. Weinstein, M.D., Michael T. Modic, M.D., Anthony J. Furlan, M.D., and John R. Little, M.D.</i>	
18.	<b>Noninvasive Diagnosis of Extracranial Cerebrovascular Disease</b>	257
	<i>Robert S. Lees, M.D. and J. Philip Kistler, M.D.</i>	
19.	<b>Noninvasive Tests for Carotid Disease: Conventional Doppler Ultrasound</b>	269
	<i>D.E. Strandness, Jr., M.D.</i>	
<b>III. Clinical Manifestations of Stroke</b>		
20.	<b>Classification of Ischemic Strokes</b>	281
	<i>J.P. Mohr, M.D. and Henry J.M. Barnett, M.D.</i>	
21.	<b>Extracranial Carotid Artery Disease</b>	293
	<i>J.P. Mohr, M.D. and Michael S. Pessin, M.D.</i>	
22.	<b>Intracranial Internal Carotid Artery Disease</b>	337
	<i>J.C. Gautier, M.D. and J.P. Mohr, M.D.</i>	
23.	<b>Anterior Cerebral Artery</b>	351
	<i>John C.M. Brust, M.D.</i>	

- |   |            |
|---|------------|
| <b>24. Middle Cerebral Artery</b>   | <b>377</b> |
| <i>J.P. Mohr, M.D., J.C. Gautier, M.D., Daniel B. Hier, M.D., and Robert W. Stein, M.D.</i> |            |
| <b>25. Posterior Cerebral Artery</b>  | <b>451</b> |
| <i>J.P. Mohr, M.D.</i>  |            |
| <b>26. Lacunes</b>  | <b>475</b> |
| <i>J.P. Mohr, M.D.</i>  |            |
| <b>27. General Features of Intracerebral Hemorrhage</b>                                     | <b>497</b> |
| <i>Carlos S. Kase, M.D. and J.P. Mohr, M.D.</i>   |            |
| <b>28. Supratentorial Intracerebral Hemorrhage</b>  | <b>525</b> |
| <i>Carlos S. Kase, M.D. and J.P. Mohr, M.D.</i>   |            |
| <b>29. Vertebrobasilar Occlusive Disease</b>  | <b>549</b> |
| <i>Louis R. Caplan, M.D.</i>  |            |
| <b>30. Hemorrhage Affecting the Brain Stem and Cerebellum</b>                               | <b>621</b> |
| <i>Carlos S. Kase, M.D. and Louis R. Caplan, M.D.</i>                                       |            |

### Index

## VOLUME 2

- |  |            |
|--|------------|
| <b>31. Intracranial Aneurysms</b>  | <b>643</b> |
| <i>J.P. Mohr, M.D., J. Philip Kistler, M.D., Joseph M. Zabramski, M.D., Robert F. Spetzler, M.D., and Henry J.M. Barnett, M.D.</i> |            |
| <b>32. Vascular Malformations of the Brain: Clinical Considerations</b>  | <b>679</b> |
| <i>J.P. Mohr, M.D., Thomas K. Tatemichi, M.D., Fenwick C. Nichols III, M.D., and Bennett M. Stein, M.D.</i>                        |            |
| <b>33. Infarction of the Spinal Cord</b>   | <b>707</b> |
| <i>Alastair M. Buchan, B.M., B.Ch., M.R.C.P. and Henry J.M. Barnett, M.D.</i>  |            |
| <b>34. Vascular Malformations and Hemorrhage of the Spinal Cord</b>  | <b>721</b> |
| <i>Alastair M. Buchan, B.M., B.Ch., M.R.C.P. and Henry J.M. Barnett, M.D.</i>  |            |
| <b>35. Venous Disease: Cortical Veins and Sinuses</b>  | <b>731</b> |
| <i>Peter C. Gates, M.B., B.S. and Henry J.M. Barnett, M.D.</i>   |            |

**IV. Specific Medical Disorders and Stroke**

- 36. Neurologic Syndromes following Cardiac Arrest and Cardiac Bypass Surgery** 747  
*John J. Caronna, M.D.*
- 37. Stroke Related to Cardiac Dysrhythmia and Valvular Heart Disease** 763  
*Anthony J. Furlan, M.D. and John P. Conomy, M.D.*
- 38. Dissections and Trauma of Cervico-cerebral Arteries** 775  
*Robert G. Hart, M.D. and J. Donald Easton, M.D.*
- 39. Giant Cell Arteritis and Isolated Granulomatous Angiitis of the Central Nervous System** 789  
*George W. Petty, M.D. and J.P. Mohr, M.D.*
- 40. Moyamoya Disease: Diagnosis, Treatment, and Recent Achievement** 805  
*Yasuhiro Yonekawa, M.D., Hajime Handa, M.D., and Takehiko Okuno, M.D.*
- 41. Fibromuscular Dysplasia** 831  
*Edward B. Heaton, M.D.*
- 42. Migraine and Stroke** 845  
*Thomas K. Tatemichi, M.D. and J.P. Mohr, M.D.*
- 43. Hypertensive Encephalopathy** 869  
*Henry B. Dinsdale, M.D.*
- 44. Binswanger's Subacute Arteriosclerotic Encephalopathy** 875  
*Fenwick T. Nichols III, M.D. and J.P. Mohr, M.D.*
- 45. Coagulopathy and Stroke** 887  
*Robert J. Raish, M.D. and John C. Hoak, M.D.*
- 46. Stroke and Substance Abuse** 903  
*John C.M. Brust, M.D.*

**V. Stroke Therapy**

- 47. Management of Cerebral Vascular Problems: Neurological and Neurosurgical Viewpoints** 921  
*Henry J.M. Barnett, M.D. and Bennett M. Stein, M.D.*
- 48. Anticoagulant and Platelet Antiaggregant Agents** 925  
*Jack Hirsh, M.D.*

- 49. Prevention of Ischemic Stroke: Risk Factors**      967  
*Philip A. Wolf, M.D., William B. Kannel, M.D., M.P.H., and Daniel L. McGee, Ph.D.*
- 50. Antithrombotic Therapy in Cerebral Vascular Disease; Antispasmodics and Fibrinolytics**      989  
*Henry J.M. Barnett, M.D.*
- 51. Surgical Management of Extracranial Occlusive Disease**      1003  
*Robert M. Crowell, M.D. and Robert G. Ojemann, M.D.*
- 52. Progressing Ischemic Stroke**      1059  
*Thomas R. Price, M.D.*
- 53. Medical Therapy of Ischemic Strokes**      1069  
*Frank M. Yatsu, M.D., L. Creed Pettigrew, Jr., M.D., and James C. Grotta, M.D.*
- 54. Cardiogenic Stroke**      1085  
*Peter C. Gates, M.B., B.S., Henry J.M. Barnett, M.D., and Malcolm D. Silver, M.B., B.S.*
- 55. Surgery of Intracranial Aneurysms**      1111  
*Robert F. Spetzler, M.D. and Joseph M. Zabramski, M.D.*
- 56. Surgical Decisions in Vascular Malformations of the Brain**      1129  
*Bennett M. Stein, M.D.*
- 57. Interventional Neuroradiology**      1173  
*Fernando Viñuela, M.D. and Allan J. Fox, M.D.*
- 58. Spontaneous Brain Hemorrhage: Surgical Considerations**      1191  
*Robert M. Crowell, M.D. and Robert G. Ojemann, M.D.*
- 59. Asymptomatic Carotid Bruit or Stenosis**      1207  
*Henry J.M. Barnett, M.D., J.P. Mohr, M.D., and Frank M. Yatsu, M.D.*
- 60. Uses and Results of Cerebral Bypass Operations**      1221  
*R. Michael Scott, M.D., F.A.C.S.*
- 61. The Rehabilitation of the Stroke Survivor**      1259  
*Glen E. Gresham, M.D.*

Index



# I.

## PATHOPHYSIOLOGY OF STROKES