

Contents

1	Background Information on Stroke—Incidence, Risks, Survival Rates and Chances, Causes, and Related Disorders	<i>Marcus Pohl and Jan Mehrholz</i>	25
1	Definition		
1	Incidence and Distribution		
1	Incidence of Stroke		25
1	Prevalence of Stroke		26
1	Survival		27
1	Risks and Causes		29
1	Nonmodifiable Risk Factors		33
1	Modifiable Risk Factors		38
1	Disorders and Their Consequences		40
1	Motor Convalescence and Rehabilitation		41
1	Following Stroke		41
1	Course of Illness Following Stroke		42
1	Prognosis		45
1	Everyday Competence and Ability to Walk Following Stroke		47
1	Quality of Life Following Stroke		
1	Summary		
12			
15	4 Early Mobilization: Opportunity or Risk?		48
15	<i>Jan Mehrholz</i>		
16			
17	2 Emergency and Acute Preclinical Management of Stroke		51
17	<i>Gert Grellmann</i>		
17	Introduction		
17	Symptoms of Stroke: Differential Diagnostics		51
17	Measures Taken at the Scene of the Emergency		54
17	Patient's Medical History		55
17	Clinical Examination		57
17	Basic Measures to be Taken by Paramedic		58
17	Summary		59
19			
19	5 Optimizing Functional Motor Recovery after Stroke		62
19	<i>Janet H. Carr and Roberta B. Shepherd</i>		
19	Introduction		
19	Acute Stage after Stroke		62
19	Impairments and Adaptations		63
19	Weakness		65
19	Loss of Motor Control		66
19	Spasticity		
19	Adaptive Changes		
19	Interrelationships between Motor Learning, Brain Plasticity, and Environments		
19	Motor Learning		67
19	Focusing Attention		68
19	Goal Setting		69
19	Practice		

Delivery of Physical Therapy—Providing Opportunities for Practice	67	The Rehabilitation Phase	142
Effects of Skill Training and the Environment on Neuroplasticity	70	Communication Assistance	143
The Rehabilitation Environment	73	Assistance with Washing and Dressing	144
Task-Oriented Training to Increase Skill and Motor Control	74	Assistance in Performing Bodily Functions	145
The Lower Limbs in Support, Propulsion, and Balance	75	Hemiplegic Shoulder	146
Task-Oriented Training	78	Swollen Hand	146
Functional Weightbearing Exercises	78	Dealing with Neglect	147
Nonweightbearing Exercises	81	Guidance for Family Members	147
Active Muscle Stretching	82		
Maximizing Muscle Endurance and Physical Fitness	83		
Training Guidelines: Balance	85	7 Ethical Questions Relating to the Care of Stroke Patients	148
Training Guidelines: Standing Up and Sitting Down	99	<i>Frank Oehmichen</i>	
Training Guidelines: Walking	110	What is at Issue?	148
Training Guidelines: Reaching and Manipulation	120	Legal Justification of Treatment	149
Conclusion	133	Medical Treatment Options	150
Appendix	133	Decisions Made On the Basis of the Medical Indication	152
6 Care of Stroke Patients	136	Meaning of the Term “Indication”	152
<i>Claudia Flaemig</i>		Meaning of the Term “Prognosis”	154
Care and Treatment Plan	136	The Dying Process As a Specific Prognostic Responsibility	155
Stroke Unit	136	Decision-Making Based On the Patient’s Own Wishes	157
Nursing Care during the Acute Phase	137	Communicative Determination of the Individual Indication and Individual Wishes of the Patient	159
Monitoring and Securing of Vital Functions	137	Internal Formation of Decisions	160
Patient Care History and Care Planning	138	External Influences on Decision-Making	161
Prevention and Early Detection of Cardiovascular Complications	138	Discussion	163
Surveillance and Safety Aspects of Medical Treatment	138	Summary	165
Implementation of Prophylactic Measures	139		
		References	167
		Index	187