NOTE TO READER:

The Joint Committee for Stroke Resources replaces the former Joint Committee for Stroke Facilities and continues its activities. The project upon which this publication is based is supported under Contract 263-76-C-0054 between the American Neurological Association and the National Institute for Neurological and Communicative Disorders and Stroke, National Institutes of Health (superseding Contract HSM 110-69-436 between the ANA and the Health Services and Mental Health Administration), Department of Health, Education, and Welfare, helping to fulfill the requirements of Section 907 of Public Law 89-239, which established the Regional Medical Programs in 1965.

The Committee hopes to review and update its guidelines periodically, as new methods of diagnosis and treatment are developed. Comments, criticisms, and corrections are invited. They should be sent to:

National Chairman
Suite 810, 1725 K Street, N.W.
Washington, D.C. 20006

This report extends the following series of publications which have appeared in STROKE between 1972 and 1976:

I. Epidemiology for Stroke Facilities Planning
II. Stroke Rehabilitation
III. The Laboratory Evaluation of Neurovascular Disease (Stroke)
IV. Guidelines for the Nursing Care of Stroke Patients
V. Clinical Prevention of Stroke
VI. Special Procedures and Equipment in the Diagnosis and Management of Stroke
VII. Medical and Surgical Management of Stroke
VIII. Training, Education, Manpower, and Research for Stroke Care
IX (1,2). Strokes in Children
X. Community Health Services for Stroke
XI. Transient Focal Cerebral Ischemia: Epidemiological and Clinical Aspects
XII. Computed Tomography in the Management of Cerebrovascular Disease
XIII. Cerebral Circulation and Metabolism in Stroke

Cross-references are indicated from time to time to material developed in other sections. The Table of Contents included with each section should aid in directing the reader to the appropriate pages.
REPORT OF THE JOINT COMMITTEE FOR STROKE RESOURCES

XIV. Cerebral Ischemia: The Role of Thrombosis and of Antithrombotic Therapy

Table of Contents

Summary ........................................................................................................................................ 150
Etiology ........................................................................................................................................ 150
Incidence of Extracranial Versus Intracranial Lesions ................................................................. 151
Venous Disease .......................................................................................................................... 152
Clinical Varieties of Cerebral Ischemia .......................................................................................... 152
Transient Ischemic Attacks (TIA) ................................................................................................. 152
Definition and Symptomatology ................................................................................................. 152
Pathogenesis .................................................................................................................................. 153
Thromboembolic .......................................................................................................................... 153
Hemodynamic ............................................................................................................................. 153
Incidence, Natural History, and Prognosis .................................................................................... 154
Reversible Ischemic Neurolologic Deficit (RIND) ........................................................................ 154
Partial Nonprogressing Stroke ...................................................................................................... 154
Pathogenesis .................................................................................................................................. 154
Diagnosis and Prognosis ............................................................................................................... 154
Progressing Stroke (Stroke-in-Evolution) ..................................................................................... 155
Incidence ....................................................................................................................................... 155
Pathogenesis .................................................................................................................................. 155
Course and Prognosis .................................................................................................................... 155
 Completed Stroke .......................................................................................................................... 155
Pathogenesis .................................................................................................................................. 156
Hemostasis and Thrombogenesis .................................................................................................. 156
Hemostatic and Thrombotic Mechanisms ..................................................................................... 156
Blood Vessels .................................................................................................................................. 156
Platelets ......................................................................................................................................... 156
Coagulation Factors ..................................................................................................................... 157
Fibrinolytic System ....................................................................................................................... 157
Protective Mechanisms Against Activated Coagulation ............................................................... 157
Thrombosis and Blood Coagulation .............................................................................................. 158
Thrombosis and Atherosclerosis .................................................................................................. 158
Diagnostic Tests ............................................................................................................................ 159
Therapeutic Inhibitors of Thrombosis ......................................................................................... 160
Evaluation of Antithrombotic Therapy .......................................................................................... 160
Design of Clinical Trials ................................................................................................................ 160
Evaluation of Reports .................................................................................................................... 161
Anticoagulant Therapy .................................................................................................................. 161
Rationale ....................................................................................................................................... 161
Randomized Trials of Anticoagulants in Patients With TIA ........................................................ 161
Nonrandomized Trials of Anticoagulants in Patients With TIA .................................................. 163
Summary of Clinical Studies of Anticoagulant Therapy in TIA ................................................... 164
Randomized Trials of Anticoagulants in Patients With Progressing Stroke (Stroke-in-Evolution) ................................................................................................................................. 164
Nonrandomized Trials of Anticoagulants in Patients With Progressing Stroke .......................... 165
Summary of Clinical Studies of Anticoagulant Therapy in Progressing Stroke .......................... 165
Randomized Trials of Anticoagulants in Patients With Completed Stroke ................................... 165
Nonrandomized Trials of Anticoagulants in Patients With Completed Stroke ............................ 167
Summary of Clinical Studies of Anticoagulant Therapy in Completed Stroke ............................ 167