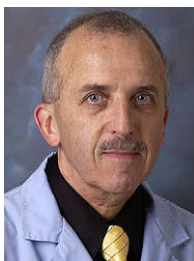


# Preface



José Biller, MD  
Guest Editor

About 750,000 strokes occur annually in the United States; the number is expected to reach one million in the year 2010. Worldwide, stroke is second only to coronary artery disease as a cause of death and is the leading cause of disability in the United States. Approximately 80%–85% of these events are ischemic strokes, 10%–15% are due to intraparenchymal hemorrhages, and 5% are related to subarachnoid hemorrhages.

Of the hundreds of thousands of ischemic stroke survivors each year, approximately 30% require assistance with activities of daily living, 20% require assistance with ambulation, and 16% require institutional care. Likewise, only 20% of patients with intracerebral hemorrhage achieve independent living at six months.

Over the past two decades, there has been an explosion of basic and clinical research into cerebrovascular disease, and as a result, there are many new and innovative therapies for patients with transient ischemic attacks, acute ischemic and hemorrhagic strokes, extracranial and intracranial arterial occlusive disease, intracranial aneurysms, and other central nervous system vascular malformations. Through multidisciplinary collaborative efforts, evidenced-based treatment options and standards of care are currently available, and a greater understanding of stroke has been achieved in areas ranging from prevention to treatment to rehabilitation. Whatever the subspecialty area of interest, the nature of clinical medicine calls for a greater understanding of contemporary medical, surgical, and endovascular

neurology/neurosurgery to better meet the needs of individual patients.

This issue of *Neurosurgery Clinics* has been written with the specific intent of highlighting preoperative and perioperative issues in cerebrovascular disease. It seeks to offer insight into the practical clinical information relative to challenges including risks associated with the discontinuation of perioperative antiplatelet and anticoagulant therapy in stroke patients, intraoperative monitoring for patients with cerebrovascular diseases, anesthetic issues, perioperative blood pressure management in patients with cerebrovascular disorders who are undergoing surgical procedures, timing and indications of carotid endarterectomy in asymptomatic and symptomatic patients, the role of intracranial vessel stenting, the role and potential indications for hemicraniectomy for patients with “malignant” middle cerebral artery territory infarctions, potential indications for extracranial/intracranial bypass surgery, surgical intervention for intracerebral hemorrhage, clipping or coiling of intracranial aneurysms, risk assessment of noncerebrovascular surgery in stroke patients, the role of thrombolytic therapy in perioperative ischemic strokes, risk assessment of stroke following coronary artery bypass revascularization and carotid endarterectomy, and selection of optimal neuroimaging in perioperative acute stroke management.

We hope that this issue will provide a timely and valuable contribution to the clinical neurosciences, particularly for health care professionals caring for these challenging patients.

I wish to extend my appreciation to the many contributors within the fields of vascular neurology/neurosurgery, and interventional neuroradiology, who, by sharing their knowledge and expertise, made this issue possible. I greatly acknowledge the editorial assistance provided by Joanne Husovski, Editor, *Neurosurgery Clinics* from WB Saunders/Elsevier.

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