

Transient Ischemic Attack and Stroke

Diagnosis, Investigation, and Treatment

Second Edition

The second edition of *Transient Ischemic Attack and Stroke* covers the clinical background and management of the full clinical spectrum of cerebrovascular disease, from TIA to vascular dementia, in a compact but evidence-based format, making it a comprehensive primer in stroke medicine. Accurate diagnosis and appropriate investigation and management have a major impact on patient outcomes in cerebrovascular disease, such as the effect of urgent antithrombotic treatment on early recurrent stroke after TIA and minor stroke, the effect of interventions such as thrombectomy and hemicraniectomy in major acute stroke, and the effect of stroke units and organized stroke care.

Written by a leading team of clinicians and researchers in the field, this book will be essential to neurologists, geriatricians, stroke physicians, allied health workers, and all others with an interest in stroke.

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Gary K. K. Lau
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Preface to the Second Edition

As predicted by Charles Warlow in his *Foreword* to the first edition of this book, advances in the field of cerebrovascular diseases have continued at pace during the 9 years since the first edition was written. Changes in clinical practice continue to come mainly from multicenter randomized clinical trials and well-designed cohort studies, particularly with better phenotyping of patients.

We now know, for example, that about 90% of the global stroke burden is attributable to modifiable risk factors and is therefore potentially preventable. We are also beginning to understand how novel non-Mendelian genetic variants also account for some of the unexplained susceptibility of stroke. We now have a better sense of who will and who won't benefit from existing treatments and also a number of new treatment strategies. For example, the benefit of tissue plasminogen activator in treatment of acute ischemic stroke patients presenting within 4.5 hours of symptom onset is now well established regardless of age and stroke severity. Endovascular treatment is now able to extend the time window of treating selected patients with acute ischemic stroke of the anterior circulation due to large vessel occlusion to 6 hours. In a subset of individuals with significant ischemic penumbra identified by appropriate neuroimaging, time window for endovascular treatment can even be extended to up to 24 hours. Non-vitamin K antagonist oral anticoagulants were not available when the first edition of this book was written but have since been shown to be effective and are now widely used in clinical practice. Patent foramen ovale closure has also recently been confirmed to be beneficial in a selected subset of individuals with stroke. The important contribution of vascular factors to dementia is increasingly recognized together with the impact of cerebrovascular events on both acute and longer-term cognitive decline.

These advances (and many more) in the field of cerebrovascular diseases have been summarized in this updated second edition. We hope you will enjoy reading this new edition as much as we have enjoyed updating it.

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