Intracranial Atherosclerosis: Pathophysiology, Diagnosis and Treatment
Intracranial Atherosclerosis: Pathophysiology, Diagnosis and Treatment

Volume Editors

Jong S. Kim  Seoul
Louis R. Caplan  Boston, Mass.
Ka Sing Wong  Hong Kong

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Preface

Intracranial atherosclerosis is a leading cause of stroke in Asians and Africans. Considering that these ethnic groups account for more than 70% of the world’s population, it could be said that intracranial atherosclerosis is the major cause of ischemic stroke worldwide. Nevertheless, as compared with extracranial atherosclerosis, intracranial atherosclerosis has been largely neglected in the literature. Nowadays, partly due to the development of imaging technologies, such as magnetic resonance, computed tomography angiography and Transcranial Doppler, that can easily assess the intracranial arterial diseases and partly because of the active research happening in Asia, the importance of intracranial atherosclerosis is being more appreciated. Moreover, recent development of technologies pertaining to stenting/angioplasty has sparkled both interest and controversy.

The aim of this book is to provide our readers with up-to-date knowledge of intracranial atherosclerosis, ranging from vascular anatomy, pathology, epidemiology, stroke mechanisms and syndromes and diagnostic methods to treatment strategies, including antithrombotics, angioplasty/stenting and surgical operations. In addition, non-atherosclerotic intracranial arterial diseases such as Moyamoya disease, dissection, vasculitis and other miscellaneous disorders are extensively discussed.

The chapters are written by experts from various parts of the world, both East and West. We believe that readers will find interesting results from cutting edge research, such as the application of high-resolution magnetic resonance imaging or the development of interventional procedures. In controversial areas, such as angioplasty/stenting, readers will be exposed to different yet balanced points of view, so that they may form an unbiased opinion on these issues. Finally, readers will also notice that despite extensive research, vague areas, yet to be investigated, still remain, such as the answers to the following questions: Why are there East–West differences in the location of atherosclerosis? What is the best medical therapy? What are the factors that best predict outcome of the patients? Who are the patients who may benefit from angioplasty/stenting or bypass surgery? Thus, we hope that this book is informative, interesting and stimulating for readers, and serves as a useful guide in their clinical and research activities.

Finally, we sincerely thank all the contributors, who dedicated their valuable time to write excellent manuscripts, and also Karger for allowing us to formulate a vehicle to communicate with our readers.

Jong S. Kim, Seoul, Korea