Handbook on Cerebral Artery Dissection

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Preface

This volume of Frontiers of Neurology and Neuroscience is devoted to cerebral artery dissection, a field in which much progress has been made in the last decade. Thus, the idea of this book was to bring together experts from all over the world to give an overview about the present knowledge and future research directions of this still poorly understood disease.

In the first chapter an animal model of carotid dissection is elaborated. In the next six chapters, epidemiology and the current knowledge and hypotheses about possible mechanisms of spontaneous and traumatic cervical artery dissection are presented. In particular, the association of cervical artery dissection with connective tissue abnormalities in skin and arteries, genetic approaches and vasodilation are discussed. The next two chapters describe the clinical manifestations of cervical internal carotid and vertebral artery dissection. The possibilities and limitations of the main diagnostic tools, ultrasound, CT, MR imaging and angiography, are the subject of chapters 10–12. An overview about the prognosis, thrombolytic and antithrombotic therapy of cervical artery dissection is given in chapters 13–15. Intracranial cerebral artery dissection is discussed in the last chapter.

It is our hope that this volume will contribute to efforts linking clinical and basic science, provide the reader with new insights and perspectives and stimulate his interest in this fascinating vascular disease.

The editors thank the authors who have made this volume possible.

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