



Book Review

Cerebral venous system in acute and chronic brain injuries, M. Lou, J. Zhang, Y. Wang, Y. Qu, W. Feng, X. Ji, J.H. Zhang, editors (Springer International Publishing, Switzerland) 2019. 253 pages. Price: Not mentioned.

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‘Cerebral Venous System in Acute and Chronic Brain Injuries’, as the name suggests, is a handbook of applied anatomy and physiology of the venous system of the brain. This book is the work of expert stroke clinicians and basic scientists from China who participated in the Sixth Elite Stroke meeting named *The Pangu Stroke Conference*. Some of the chapters are invited.

The venous system contributes to half of the brain circulation, and about 70 per cent of the blood in the brain is venous blood. The venous system has not received as much attention as the arterial system of the brain, and relatively less is known about cerebral venous circulation; hence, there has been a need for a book on the applied aspects of venous system of the central nervous system. This book fulfils that need.

The book has 19 chapters that cover all the aspects of the venous system. It begins with the scientific foundation of the applied physiology and anatomy of venous system with animal models of a common disease affecting the venous system, ‘venous infarctions’. The book has chapters on the neurosurgical, neurological, neuroradiology and neuroendovascular aspects of the venous system. There are many chapters, which are usually not covered in standard textbooks on the subject, e.g., ‘Animal Models of Venous Stroke’, ‘Role of Cerebral Venous System in Neurodegenerative Disorders’ and ‘Role of Cerebral Venous System in Traumatic Brain Injury’. The book ends with a chapter on the role of cerebral venous system in precision medicine’, thus, having something to read for everyone.

Each chapter begins with an abstract that provides the reader with the scope of the chapter. The layout of each chapter is crisp and clear with easy readability. Each chapter is adequately illustrated with diagrams and pictures. A few chapters also provide a comprehensive table of review of literature such as the chapter on idiopathic intracranial hypertension. The chapter on the role of venous system in haemorrhagic stroke is, however, very brief. Venous thrombosis and haemorrhagic stroke form a major chunk of cerebral venous system disorders, and hence are required to be covered more extensively.

The standard textbooks on stroke cover this topic more extensively; hence, reading this book does not add to the knowledge on haemorrhagic stroke. Decompressive craniectomy is also widely performed for malignant haemorrhagic infarction following venous thrombosis. This aspect is also not touched upon in this book. Moreover, intensive care management of venous thrombosis is also not covered. There is one chapter on the thrombosis of veins in arteriovenous malformation, which is merely a case report. It could have been merged with another chapter dealing on the same subject.

In summary, this book highlights the changes in the vein morphology and functions that are known, or likely to occur related to acute and chronic brain injuries, and aims to advance the therapeutic management of acquired brain injury. With the evidence presented in this book, future clinical management of acutely brain-injured patients will expand to include the recirculation concept, establishing a harmony between arterial and venous systems, in addition to the established recanalization and reperfusion strategies.

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