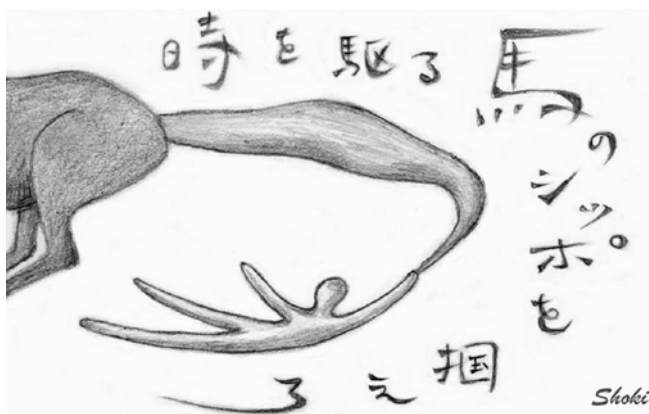


Preface



The current era is the era of rapidly advancing technologies. My drawing above says in Japanese, “Be sure to grasp the tip of the tail of the horse that is flying in time and space.” Just so, we need to catch up with and grab hold of the tip of the very rapidly advancing technology.

We are at a point in time when we can visualize intracranial and spinal arteries and veins, or the neurovascular system, using imaging obtained without significant invasion. This book demonstrates the anatomy of the neurovascular system and images of the pathologic processes that involve these vessels in forms that may be applicable, or at least helpful, to the interpretation of images acquired with such modalities. Many excellent studies that focus on the anatomy of the intracranial arteries have accumulated in the literature. What a pity if we do not take advantage of these archival treasures to interpret images obtained using modern techniques! To utilize them efficiently, I did not hesitate to reproduce a series of engaging figures from the literature.

To facilitate the reader’s understanding of the book’s figures and for annotation, consistent abbreviations have been adopted for individual structures and incorporated into the figures without obscuring recognition of the structures indicated. Within this context, I presume that some structures can be discerned without reference to the annotations and that repeating the recognition and referring processes for individual structures may promote

memorization. In addition, in order that the direction of the transverse diagrams of the brainstem and spinal cord matches the orientation of modern transverse images, the figures are presented with the anterior orientation on the upper side and the posterior on the lower side. Our presentation reverses the traditional presentation of diagrams and images with the posterior on the upper side and the anterior on the lower side.

Finally, I wish to extend my gratitude to all the contributors to this book for their diligent efforts and to colleagues, families, and friends whose encouragement and support helped us bring this project to successful completion. Many thanks go as well to Akio Muto for his gracious help in obtaining necessary publication permissions to reproduce figures, Philips Healthcare for their support for the preparation of this book, Yuki Sugawara for her outstanding secretarial assistance; Nobuo Sasaki and other radiological technologists in the Division of Radiological Science of the Research Institute of Brain and Blood Vessels, Akita, Japan for their help in taking microangiograms of cadaver brains; Tatsuo Nagasaka and other radiological technologists in the MR section of Tohoku University Hospital, Sendai, Japan; and all the radiological technologists in the institutions of the contributors to this book for obtaining MR and CT images; Sadao Yamauchi for his photographic work; and Rosalyn Uhrig for her editorial assistance in the preparation of the manuscript. We were fortunate to work with Denise Roland and the team at Springer-Verlag London, dedicated professionals who guided us with great patience.

I dedicate this book to my wife, Reiko, and my children, Teppei and Sayaka.

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