



Atlas of Operative Microneurosurgery

Aneurysms and Arteriovenous Malformations

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W.B. SAUNDERS COMPANY

A Division of Harcourt Brace & Company

Philadelphia London Toronto Montreal Sydney Tokyo

preface

This is an atlas of microscopic neurosurgery. We were encouraged by the W.B. Saunders Company to develop a series of texts to succeed *The Atlas of Neurosurgical Techniques* produced by James Poppen of the Lohry Clinic and *Operative Neurosurgery* by Ludwig Kempe of Walter Reed Medical Center. This request posed a formidable challenge because these two publications, as bibles of technique, have served several generations of neurologic surgeons and have made lasting contributions to anatomic knowledge and surgical expertise. Because the atlases of Poppen and Kempe recorded the essential information for most neurosurgical operations, surgeons continue to use these texts for their simplicity of style and artistic clarity. However, their wealth of surgical experience was recorded before microscopic surgery was well developed.

Contemporary neurologic surgeons are dedicated to approaches performed with the aid of magnification. The microscope has significantly changed the operative field, making it smaller and deeper, with a limited depth of field. Thus, the change from macroscopic to microscopic surgery has increased the complexity for both surgeon and artist to understand and depict an operation from gross surface anatomy to the depths of exposure. *The Atlas of Operative Microsurgery* attempts to show the dynamic panorama of unfolding pathoanatomy of neurologic disorders and their surgical therapies.

Many talented neurologic surgeons, such as Fox, Tong, Sugita, Sundt, and Yasargil have written superb atlases and surgical texts sharing their expertise in microsurgical procedures. In our series of volumes, we hope that a continuity of experience from a single neurosurgical center will provide both artistic and surgical consistency. We sought to produce illustrations that are aesthetically pleasing and anatomically accurate. In addition, we believe that these illustrations demonstrate the dynamic quality of microsurgical techniques currently evolving and their essential components. An atlas can neither depict differential diagnosis nor serve as a treatise on neurologic surgery. Therefore, we neither include references nor attempt to credit the innumerable neurologic surgeons who contributed to the development of current microsurgical techniques. Suffice it to say, our expertise is established on all that we learned from our predecessors.

I am particularly appreciative to my teachers Donald D. Matson, Robert G. Ojemann, William H. Sweet, H. Thomas Ballentine, Frank H. Mayfield, Thoralf M. Sundt, Charles Drake, and Guzi M. Yasargil, who tremendously influenced my personal development and the evolution of neurologic experience at the Mayo Neurological Institute. We have incorporated many aspects of their teachings into our practice—a practice that has nurtured the artistic presentation of a practical "how-to" series of books.

We hope this series will benefit residents and young neurologic surgeons, whose experiences are evolving, by illustrating basic techniques that will provide a foundation on which to build expertise.

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