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Kenichiro Sugita

# Microneurosurgical Atlas

With the Assistance of Shigeaki Kobayashi

With 456 Figures  
(Including 202 Colored Illustrations by the Author)

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The operations I perform every year never fail to provide me with new insights into the practice of neurosurgery, and lead me not infrequently to new ideas concerning surgical techniques or equipment. The present work is a kind of surgical diary of a neurosurgeon who, he would like to think, is ever improving his skills. Although there have already been many distinguished publications, the book will, I believe, be of particular help to young neurosurgeons.

I perform only a hundred or so operations a year, selected because of their technical difficulty. As difficult or unusual cases are rather few, it is important that every practising neurosurgeon should record those he encounters in exact detail. I would like especially to suggest to young surgeons that they draw detailed operative pictures of such cases, as I have done. The collection will become an important and valuable private text in the future.

In the past 18 years I have performed about 2000 operations under the microscope. I have selected for this atlas about 100 of the cases I have dealt with in the past 8 years. I treat the technical problems of each operation in considerable detail, and I have included all my unsuccessful cases as they taught me more than the successful ones. I drew each picture of the operative findings from memory soon after the operation, without the aid of photographs or videotapes, and there may therefore be occasional minor inaccuracies in the anatomical relationships or size. In particular, the size of an aneurysm or tumor may sometimes have been represented larger than it actually was; this is a common problem in immediate post-operative drawings. The operating fields have been recon-

structed as they would appear with considerable retraction of the brain, though the actual field was usually no more than one third or one fourth of that shown; cotton patties used for covering the cortex are omitted in the drawings.

In the majority of cases I performed the operation with my associates, all of whom have more than 10 years' clinical experience in neurosurgery. Such splendid teamwork as exists in our group is one of the most important factors in successful surgery, and for this purpose our system of stereoscopic assistant microscopes is indispensable. I wish to extend my warmest thanks for their constant support to all my associates in the university hospitals of Shinshu and Nagoya and in the affiliated hospitals of Aizawa, Showainan, Seguchi, Komoro, Shinonoi, Kobayashi, Suwa and Nagoya Red Cross, Chukyo, Ohgaki, Yokkaichi, Ichinomiya, Tajimi, Tosei, Okazaki, Handa, Anjo, Nishio, Toyohashi, and Saiseikai-Shizuoka.

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I	Olfactory nerve
II	Optic nerve
III	Oculomotor nerve
IV	Trochlear nerve
V	Trigeminal nerve
VI	Abducens nerve
VII	Facial nerve
VIII	Acoustic nerve
IX	Glossopharyngeal nerve
X	Vagus nerve
XI	Accessory nerve
XII	Hypoglossal nerve
A	Anterior cerebral artery
A1	Proximal portion of the anterior cerebral artery
A2, 3	Distal anterior cerebral artery
a ch	Anterior choroidal artery
a com	Anterior communicating artery
AICA	Anterior inferior cerebellar artery
An	Aneurysm
B	Basilar artery
C	Carotid artery
M1	Proximal middle cerebral artery
M2, 3	Distal middle cerebral artery
MCA	Middle cerebral artery
P1	Proximal posterior cerebral artery
P2, 3	Distal posterior cerebral artery
PCA	Posterior cerebral artery

p com	Posterior communicating artery
PICA	Posterior inferior cerebellar artery
SCA	Superior cerebellar artery
VA	Vertebral artery

### Explanation of X-rays:

Axial CT scans show the right hemisphere on the right while in coronal scans the right hemisphere is on the left. Abbreviations: *preop*, preoperative; *postop*, postoperative; *lat*, lateral view; *AP*, anteroposterior view; *CAG*, carotid arterial angiogram; *VAG*, vertebral arterial angiogram.

### Addresses of the Companies Supplying the Instruments

Mizuho Ikakogyo Co., Ltd. (floating chair, operating table, instrument table, multipurpose head frame, tapered self-retaining retractor, aneurysm clip, balanced suction, tapered brain retractor, hook, and silver dissector): Hongo 3-29-10, Bunkyo, Tokyo, Japan.

Nagashima Ika Co., Ltd. (operating microscope): Hongo 5-24-1, Bunkyo, Tokyo, Japan.

Chiyoda Seisakujo Co. (microscope sterilizer): Koshoku, Nagano, Japan

Nihon Kohden (facial movement monitor): Asahi 2-11-34, Matsumoto, Japan