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CLINICAL NEUROSURGERY





THORALF M. SUNDT, JR., M.D.

Preface

This volume of *Clinical Neurosurgery* is dedicated to Thoralf M. Sundt, Jr., M.D., Honored Guest at the 39th Annual Meeting of the Congress of Neurological Surgeons, held in Atlanta, Georgia, from October 28 to November 2, 1989.

Dr. Sundt, Chairman of Neurological Surgery at the Mayo Clinic, has written four papers for this collection; these summarize his vast experience with supratentorial arteriovenous malformations, giant aneurysms, arteriovenous malformations of the posterior dural sinuses, and controversies in vascular neurosurgery. Together they are a remarkable distillation of his many years of experience in managing these difficult problems. A biography of Dr. Sundt and a bibliography of his work are contained in this volume.

The presidential address, by J. Michael McWhorter, M.D., is a thoughtful and provocative beginning to the volume, highlighting some of the ethical conundrums that are part of the contemporary practice of neurosurgery.

The entire scientific program, under the superb direction of annual meeting Chairman Nick Hopkins and Chairman Martin Camins, was an intellectual and educational success. There were four general scientific sessions: Conceptual Frontiers in Neurosurgery, New Concepts in Cerebrovascular Surgery, New Concepts in Skull Base Surgery, and Disorders of the Cervical Spine. In each of these areas, this volume offers a broad contemporary understanding of the issues.

The first section on conceptual frontiers includes the present plan to map the human genome; the status of neurosurgical manpower in the United States; neurotransplantation, with its promises and problems; plagues, including AIDS and head trauma; America's apparent decline or burgeoning in the international market; the neurosurgeon's place in public opinion; and an exciting new concept of medical education.

The section on cerebrovascular surgery focuses on new techniques, including transcranial Doppler ultrasonography, three-dimensional magnetic resonance angiographic imaging, cerebral ischemia, intraoperative angiography, interventional radiologic adjuncts, posterior fossa arteriovenous malformations, and autoregulation in hypertensive and elderly normotensive patients.

The section on skull base surgery represents a compendium of anatomical and surgical presentations in this exciting new area, including detailed

commentary about approaches to the cavernous sinus, frontal skull base, clival area, sellar and parasellar area, and the glomus region.

The cervical spine section includes commentary on new techniques of stabilization and approaches to problems of cervical spine injury, central cord syndrome, ankylosing spondylitis, cervical fusion, cervical spondylotic myelopathy, osseous lesions and metastatic tumors, and the craniocervical junction.

The editor is grateful to the contributing authors for their conscientious work in preparing their papers and to the tireless editorial board for providing peer review. We are especially grateful for the editorial work of Joan Daniels in the Department of Neurosurgery at Children's Hospital and Carol-Lynn Brown and Margie Keating at Williams & Wilkins.

Finally, on a personal note, I would like to thank the Publications Committee of the Congress of Neurological Surgeons for giving me the privilege of serving as the editor of *Clinical Neurosurgery* for these last three years, as well as to wish my successor, Dr. Warren Selman, every success.

PETER McL. BLACK

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Biography of Thoralf M. Sundt, Jr., M.D.

The Honored Guest for the 1989 meeting of the Congress of Neurological Surgeons is Dr. Thoralf M. Sundt, Jr., Chairman of the Department of Neurological Surgery at the Mayo Clinic and Professor of Neurological Surgery at the Mayo Medical School. He is an internationally recognized leader in cerebrovascular surgery who has written more than 200 articles on this subject.

Dr. Sundt's initial career interests lay in the military and not in medicine. As the middle son of an architect, he followed in the footsteps of his two uncles and entered the U.S. Military Academy at West Point at the age of 18 years. After graduation, he had a distinguished career in the Korean War and was awarded the Bronze Star with Oak Leaf Cluster.

Because "practicing for war was boring," he decided to pursue a career in medicine and subsequently entered the University of Tennessee Medical School in 1956. Inspired by Dr. Eustace Semmes and Dr. Francis Murphy, he undertook his residency training at the University of Tennessee. During his residency, he spent 6 months at the Mayo Clinic studying medical neurology. Impressed by the large number of surgical cases done there and the opportunity to work with Dr. Collin MacCarty and Dr. Ross Miller, he returned to the Mayo Clinic upon completion of his residency for additional training. His interest in cerebrovascular surgery developed while working in the laboratory with Dr. Arthur G. Waltz. During this period, his concern for the high morbidity and mortality related to direct surgical approaches to intracranial aneurysms stimulated the development of the encircling clip grafts for aneurysms that tear at their base.

In 1966, he joined the University of Tennessee faculty and in 3 years operated on more than 150 intracranial aneurysms. In 1969, he was offered a staff position at the Mayo Clinic. Since then, he has refined surgical techniques for operations such as carotid endarterectomy and intracranial aneurysms with results considered among the best in neurosurgery. He continues to recognize the role of revascularization procedures for cerebral ischemia.

Dr. Sundt has been an active participant in organized neurosurgery. His current appointments include the editorship of the *Journal of Neurosurgery*, chairmanship of the Credentials Committee of the American Board of Neurological Surgery, and the presidency of the American Academy of Neurological Surgeons.

His professional successes have been transcended by his role as husband and father. The faithful and loving support of his wife, Lois, has been

a mainstay for 36 years. Their three children are Laura, a successful businesswoman; Thoralf, a resident in cardiac surgery; and John, an attorney. Dr. Sundt's hobbies and interests include military history, violin, ecology, and arboreal horticulture.

Dr. Sundt is highly respected and admired by his colleagues as a skilled neurosurgeon and gentleman. Among those he has trained, he enjoys the deepest loyalty and esteem.

PHILIP W. TALLY, M.D.

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