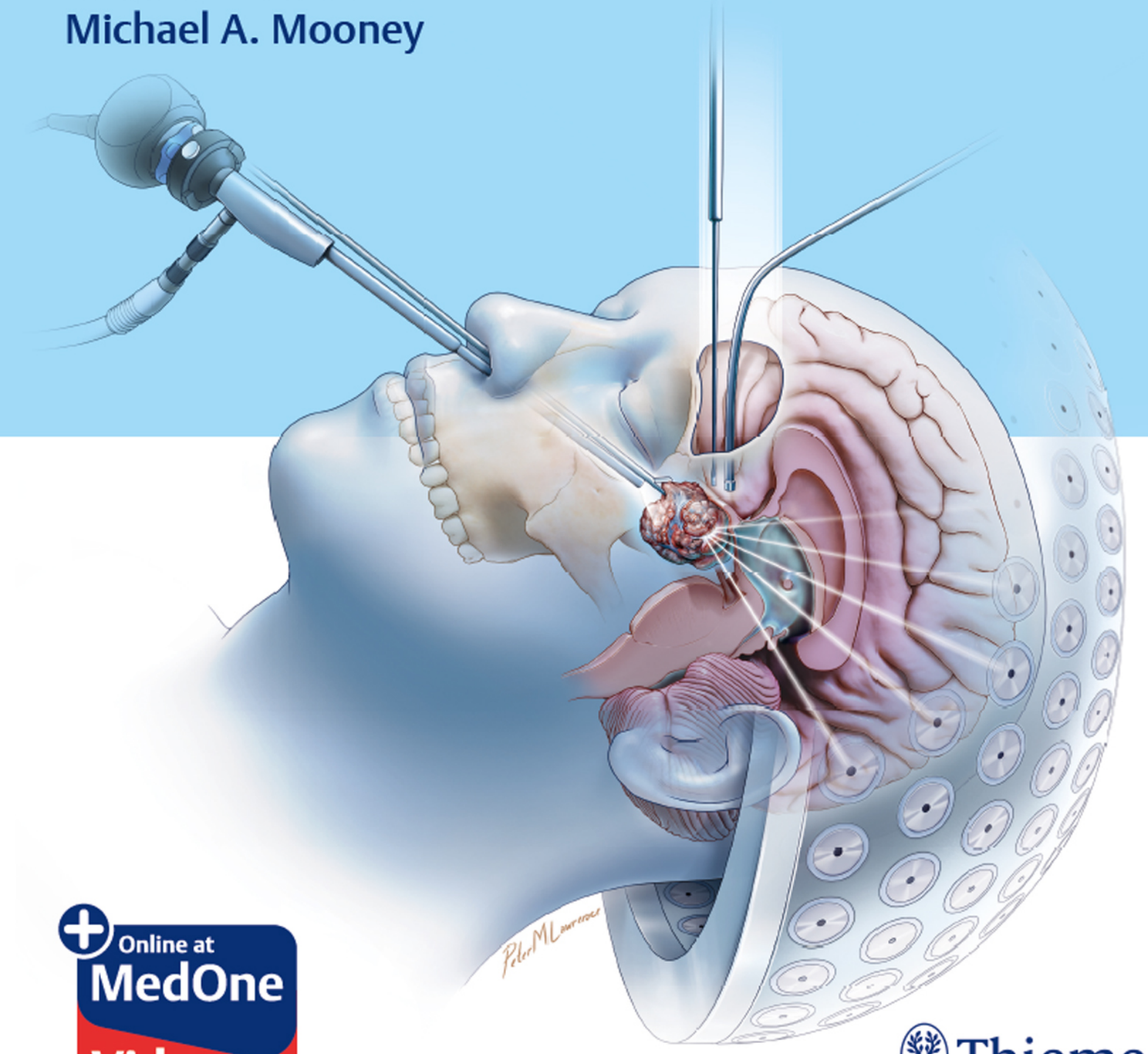
Controversies in Skull Base Surgery

Andrew S. Little
Michael A. Mooney



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Andrew S. Little, MD
Assistant Professor
Department of Neurosurgery
Barrow Neurological Institute
St. Joseph's Hospital and Medical Center
Phoenix, Arizona, USA

Michael A. Mooney, MD
Resident
Department of Neurosurgery
Barrow Neurological Institute
St. Joseph's Hospital and Medical Center
Phoenix, Arizona, USA

99 illustrations

On the cover

The illustration depicts three different skull base surgical options: expanded, endoscopic endonasal surgery, transcranial microsurgery, and radiosurgery.

Thieme
New York • Stuttgart • Delhi • Rio de Janeiro

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Library of Congress Cataloging-in-Publication Data
Names: Little, Andrew S., editor. | Mooney, Michael A. (Neurosurgeon), editor. Title: Controversies in skull base surgery / [edited by] Andrew S. Little, Michael A. Mooney.
Description: New York : Thieme, [2019]
Identifiers: LCCN 2019005266| ISBN 9781626239531 (hardcover) | ISBN 9781626239548 (e-book)
Subjects: | MESH: Skull Base–surgery Classification: LCC RD529 | NLM WE 705 | DDC 617.5/14–dc23 LC record available at https://lccn.loc.gov/2019005266

Thieme Publishers New York
333 Seventh Avenue, New York, NY 10001 USA
+1 800 782 3488, customerservice@thieme.com

Thieme Publishers Stuttgart
Rüdigerstrasse 14, 70469 Stuttgart, Germany
+49 [0]711 8931 421, customerservice@thieme.de

Thieme Publishers Delhi
A-12, Second Floor, Sector-2, Noida-201301
Uttar Pradesh, India
+91 120 45 566 00, customerservice@thieme.in

Thieme Publishers Rio de Janeiro, Thieme Publicações Ltda.
Edifício Rodolpho de Paoli, 25º andar
Av. Nilo Peçanha, 50 – Sala 2508
Rio de Janeiro 20020-906 Brasil
+55 21 3172-2297 / +55 21 3172-1896
www.thiemerevinter.com.br

Cover design: Thieme Publishing Group
Cover art: Peter M. Lawrence, MS, CMI
Typesetting by Thomson Digital, India

Printed in The Unites States of America by
King Printing Company, Inc. 5 4 3 2 1

ISBN 978-1-62623-953-1

Also available as an e-book:
eISBN 978-1-62623-954-8

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This book is dedicated to my family, whose love and support has cleared the path to complete this project and has never failed to inspire me.

Andrew S. Little

To my wife and children for their support.
To my colleagues and mentors at Barrow Neurological Institute for their inspiration.

Michael A. Mooney

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Foreword

In my more than 40 years of practicing skull base and vascular neurosurgery, I have found that one persistent challenge we all face is to stay current on the changing paradigms of disease management for patients with skull base disease. Obtaining the best available evidence in a field dominated by expert opinion and bias is problematic. In addition, skull base diseases are rare, which can impede the development of truly useful treatment guidelines. Furthermore, there are often myriad treatment options and scant evidence of the superiority of any one option over another.

Numerous intersecting trends shape the current care of the skull base patient. These trends include the emergence of endonasal and intracranial endoscopy, the development of state-of-the-art endovascular surgery techniques, the widespread adoption of radiosurgery, the increased focus on quality-of-life issues for patients, and an improved understanding of the molecular drivers of skull base neoplasms.

Our early skull base efforts were directed at gaining adequate access to deep skull base pathologies, which led to the development of extensive petrosal, transfacial, far lateral, and transoral routes. Success was defined by the dramatic resection of mass lesions, such as meningiomas, chordomas, juvenile angiofibromas, and chondrosarcomas. Complications attributed to these approaches and resections were accepted as unavoidable. Thus, a transcochlear approach that resulted in the loss of hearing and, at best, incomplete facial function was deemed to have acceptable morbidity when it allowed the clipping of a giant midbasilar artery aneurysm.

However, as our specialty matured, our paramount vision shifted toward minimally invasive corridors to pathologies, with an emphasis on maintaining and improving the patient's quality of life. This comprehensive volume beautifully documents this sea change by illuminating the current state of skull base surgery. Drs. Andrew Little and Michael Mooney have focused on documenting morbidity, such as nasal obstruction, drainage, and crusting after successful endonasal procedures—complaints generally ignored or minimized but of great importance to the patient's quality of life. Only when these symptoms are documented can they be appropriately addressed.

Drs. Little and Mooney have not only taken on—and met—the challenge of documenting the current state of skull base surgery but also have provided the reader with guidelines for treating patients with skull base disease. They have assembled a cadre of experts in their respective fields who artfully describe the controversies with which they are confronted. In the chapters they have contributed to this volume, these authors share their experiences, biases, and institutional preferences, and they summarize the best available evidence in tabular format. Many authors also present instructional case examples and offer suggestions for future studies to help clarify areas of controversy.

Over the years, I have taken great pride in the clinical and academic accomplishments of Drs. Mooney and Little. This book demonstrates their continued professional growth. Since I have had the honor of being involved in their training, I can personally attest to their discernment, the excellence of their surgical skills, and their devotion to their patients and their profession. I enthusiastically recommend this comprehensive text as a concise and evidence-based summary of current treatments for practitioners caring for patients with skull base diseases.

Robert F. Spetzler, MD
J.N. Harber Chairman Emeritus of Neurological Surgery
Director Emeritus Barrow Neurological Institute
Phoenix, Arizona, USA