Surgery of the Brainstem

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To my patients, always my greatest inspiration.

Robert F. Spetzler

To Kristin, Kayhan, and Layla.

M. Yahar S. Kalani

To Suzanne—my rock, my warrior, my inspiration.

Michael T. Lawton
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Preface

The brainstem has long been fabled to be unsurmountable territory, with surgery in and around it considered to be a fool’s errand. However, recent advances in imaging, anesthesia, monitoring, surgical technique and instrumentation, postoperative care, and rehabilitation have made it possible to approach lesions in the brainstem with more surety and better outcomes. Nonetheless, the decision to proceed with the treatment of a patient with brainstem pathology is not trivial, and many factors influence this decision. The physician must have an honest and frank discussion with the patient and counsel toward treatment only if the therapy can likely improve upon the natural history of the pathology. Then and only then should treatment be recommended, after weighing such factors as the nature of the ailment; the patient’s wishes, age, and medical condition; the surgeon’s experience; and the expected outcomes.

Operations in and around the brainstem are often fraught with transient, and sometimes permanent, morbidity. Counseling patients about the nature and duration of expected morbidity is one of the most important responsibilities of the physician. Not all pathology within or adjacent to the brainstem requires surgery. Selecting patients cautiously, developing technical skill, and building experience are keys to success.

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