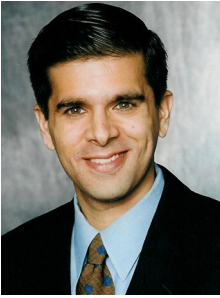


Preface



Manish K. Aghi, MD, PhD



Lewis S. Blevins Jr, MD

Guest Editors

Pituitary tumors can be found in nearly one in five people based on autopsy studies and MRI studies of healthy volunteers. The majority of these tumors are asymptomatic, slow-growing pituitary adenomas or Rathke's cleft cysts. When symptomatic, the challenge involves treatment in a manner that alleviates symptoms without compromising a patient's endocrine function or exposing the patient to other morbidities such as meningitis, arterial injury, or CSF leak. When asymptomatic and incidentally found, the challenge involves weighing the natural history of the lesion and its consequences versus the risks of surgery.

Over the past few decades, treatment of pituitary tumors has evolved to include new medications, the use of endoscopic endonasal surgical techniques, and increasing ability to use radiosurgery to deliver high doses of radiation selectively to the tumor.

This issue of *Neurosurgery Clinics* aims to provide an organized and expansive overview of the latest advances in the diagnosis, natural history, and management of pituitary tumors. Specifically, we present an overview of imaging of the pituitary gland, an area with imaging properties distinct from the rest of the central nervous system. We then relate the management of incidentally found pituitary tumors, followed by details of endoscopic surgery for pituitary tumors. The role of external beam radiation therapy and radiosurgery in the management of pituitary tumors is then reviewed, followed by management strategies for large

nonfunctional adenomas. The clinical management of rare pituitary tumors that become malignant pituitary carcinomas is discussed, followed by strategies for managing hormonally active tumors like prolactinomas, growth hormone-secreting adenomas causing acromegaly, and ACTH-secreting adenomas causing Cushing's disease. The issue concludes with a discussion of diabetes insipidus, the most common morbidity seen with the treatment of pituitary tumors.

These contributions are presented by some of the world's foremost experts in endocrinology, neurosurgery, and radiation oncology. We hope the combined perspective of these experts will make this issue a valuable resource for physicians caring for patients with pituitary tumors.

Manish K. Aghi, MD, PhD

UCSF Neurosurgery

Center for Minimally Invasive Skull Base Surgery

California Center for Pituitary Disorders at UCSF

505 Parnassus Avenue, Room M779

San Francisco, CA 94143-0112, USA

Lewis S. Blevins Jr, MD

California Center for Pituitary Disorders at UCSF

400 Parnassus Avenue, Room A-808

San Francisco, CA 94143-0350, USA

E-mail addresses:

AghiM@neurosurg.ucsf.edu (M.K. Aghi)

BlevinsL@neurosurg.ucsf.edu (L.S. Blevins)