
Since Kennedy’s introduction in the 1980s of endoscopic surgery for the management of inflammatory sinus disease, advancing knowledge along with new technologies and instrumentation have aided surgeons in expanding endoscopic techniques into resection of tumors of the skull base generally and pituitary tumors specifically. 

In 1992, Jankowski described the first successful endonasal endoscopic resection of a skull base pituitary tumor via a transsphenoidal approach. As this technique has become popularized, it has been shown to have improved complication rates, shorter hospital stays, and substantially reduced overall costs compared to open sublabial transseptal approaches. Today, minimally invasive approaches are becoming more prevalent than ever, with increasing numbers of neurosurgeons and otolaryngologists becoming trained in endoscopic techniques.

Endoscopic Pituitary Surgery, by Schwartz and Anand, published in 2011, is a comprehensive review of pituitary gland disease and its medical and surgical management. The authors’ lofty goal was to create a book that served as a “bridge from the past to the present and future of pituitary surgery.” A quick perusal recognizes that they have accomplished this goal and more, developing a text that will benefit otolaryngologists and neurosurgeons, in addition to others with an interest in management of pituitary disease including endocrinologists.

The text begins with several interesting and useful chapters outlining the history, anatomy, and equipment needed to perform endoscopic endonasal pituitary surgery. This is followed by solid sections on preoperative evaluation and surgical indications, broken down into both neurosurgical and endocrine. There is also a comprehensive chapter on radiographic evaluation and one on histology. The text also has detailed sections on specific hypophyseal pathology including prolactinomas, apoplexy, acromegaly, Cushing’s disease, thyroid-stimulating hormone-related tumors, and nonfunctioning adenomas.

Several strengths of the book deserve special mention. A chapter on neuro-ophthalmologic considerations as they relate to pituitary pathology is a nice addition, with an excellent description of neural connections and signs and symptoms to be cognizant of during an evaluation. The text also provides details of surgical techniques for both neurosurgeons as well as otolaryngologists for approaches to the sella and surgery within the cavernous sinus. Further detail is provided on approaches for macroadenoma and carcinoma. The text also has several sections on postoperative care guidelines, and a chapter on managing postoperative sinusitis, a welcome addition representing a critical component of care for these patients that is frequently overlooked if a multidisciplinary approach is not taken. There are also sections on radiosurgery and anesthesia considerations that provide solid overviews of these complex topics.

Complications including cerebrospinal fluid leak and carotid injury are reviewed along with considerations for postoperative critical care. These sections are particularly well written and provide critical points for a successful approach to dealing with potentially life-threatening complications. The debate between endoscopic versus microscopic techniques is also addressed in detail, whereas the remainder of the text includes a number of chapters on emerging technology, which include virtual surgery and use of three-dimensional technology, providing a glimpse as to what the future will hold. Overall, the combination of excellent endoscopic cadaveric pictures, intraoperative photographs, along with illustrations provides an improved focus on key points.

There is some redundancy within the text as can be expected with any comprehensive work with multiple authors such as use of intraoperative magnetic resonance imaging, microscopic versus endoscopic techniques, and some of the endocrine topics. However, this does not detract from the text, as each topic is clearly important to the management of these patients, and differing viewpoints enhance the understanding of the reader.

In sum, this text represents a modern and comprehensive encapsulation of pituitary surgery from inception to the current and beyond. It serves as an excellent reference for residents or novice surgeons wishing to initiate endoscopic techniques at the cranial base, while also serving as an inclusive review for those more seasoned practitioners.

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