# Contents

#### Preface: Frontal Sinus Disease: Contemporary Management

χv

Jean Anderson Eloy and Michael Setzen

# **Overview of Frontal Sinus Pathology and Management**

899

Alejandro Vázquez, Soly Baredes, Michael Setzen, and Jean Anderson Eloy

The frontal sinus is the most complex of all paranasal sinuses. Given its proximity to the cranial vault and orbit, frontal sinus pathology can progress to involve these structures and lead to significant morbidity, or even mortality. Surgical management of the frontal sinus is technically challenging. Various open and endoscopic surgical techniques are available to the otolaryngologist. This article presents an overview of the major disease entities that affect the frontal sinus, with a special emphasis on treatment principles and surgical management.

## **Evaluation and Decision Making in Frontal Sinus Surgery**

911

Alok T. Saini and Satish Govindaraj

Management of frontal sinusitis can be challenging for even the most experienced otolaryngologists. A thorough understanding of the anatomy and pathophysiology of the frontal sinus is essential to properly manage disease affecting the frontal sinus. Being able to distinguish acute viral from acute bacterial and acute from chronic sinusitis is crucial because these distinctions guide appropriate management. Nasal endoscopy can confirm diagnosis, and radiologic imaging, including computed tomography and MRI, is often a necessary adjunct that aids in determining appropriate therapeutic decisions. One must be aware of the many procedures used in the surgical treatment of frontal sinusitis.

#### **Medical Management of Frontal Sinusitis**

927

Maheep Sohal, Belachew Tessema, and Seth M. Brown

Rhinosinusitis is a term that has long been used to describe a diverse disease entity that encompasses several related but distinct conditions involving the paranasal sinuses. Frontal sinusitis represents one such entity with its own unique treatment considerations. Like rhinosinusitis as a whole, the role of medical management in the treatment of frontal sinusitis cannot be overlooked. Contemporary medical management of frontal sinusitis requires recognition of the unique disease process with implementation of targeted therapies aimed at addressing the specific pathophysiology.

#### Anatomic Considerations in Frontal Sinus Surgery

935

Adam J. Folbe, Peter F. Svider, and Jean Anderson Eloy

Comprehension of the complex anatomic variants comprising the frontal sinus outflow tract is essential for successful surgical intervention.

Deviation from sound technique increases the potential for a variety of deleterious sequelae, including recurrent disease as well as catastrophic intracranial and orbital injury. Furthermore, incomplete removal of elements occluding the frontal recess can result in severe stenosis that can increase the difficulty of further interventions. This review covers anatomic considerations that should be kept in mind when performing frontal sinus surgery.

# Instrumentation in Frontal Sinus Surgery

945

# Bobby A. Tajudeen and Nithin D. Adappa

Frontal recess dissection proposes many challenges to the surgeon. These challenges stem from its highly variable nature, small caliber, difficult visualization, and proximity to vital structures such as the skull base and orbit. As such, delicate mucosal-sparing dissection of the frontal recess with proper instrumentation is paramount to minimize scar formation and ensure patency. Here, the article explores key instrumentation in frontal recess surgery with an emphasis on hand instruments and adjunctive technologies.

## **Preventing and Managing Complications in Frontal Sinus Surgery**

951

Jean Anderson Eloy, Peter F. Svider, and Michael Setzen

This review covers potential complications of frontal sinus surgical management and strategies for prevention of these complications. Accordingly, recent advances in frontal sinus surgical techniques are described, and the management of complications stemming both from these and traditional techniques are detailed.

#### Balloon Catheter Dilation of the Frontal Sinus Ostium

965

Michael J. Sillers and Kristopher F. Lay

The decision to operate on the frontal sinus is based on persistent symptoms that have been refractory to appropriate medical therapy with associated radiographic evidence of disease by computed tomography. There is currently no evidence to support operating on radiographically negative frontal sinuses, regardless of the availability of technology or site of service options. There are many surgical procedures as well as a variety of different technologies available for the treatment of symptomatic, medically refractory frontal sinus disease. Balloon catheter dilation can be performed safely in an office setting with outcomes comparable to those in traditional operating room settings.

#### **Utility of Image-Guidance in Frontal Sinus Surgery**

975

Gretchen M. Oakley, Henry P. Barham, and Richard J. Harvey

The frontal sinus can present a challenging surgical dissection for the endoscopic surgeon. Image guidance as a surgical adjunct has become widely accepted for surgeries in this area. It can help verify vital structures and manage disorienting surgical conditions, improving surgeon confidence in performing safer and more complete surgery. It is relied upon heavily for placement of limited external frontal sinusotomies for disease

# Download English Version:

# https://daneshyari.com/en/article/4123361

Download Persian Version:

https://daneshyari.com/article/4123361

<u>Daneshyari.com</u>