

Contents

Preface	xi
Minas Constantinides	
The Rhinoplasty Consultation and the Business of Rhinoplasty	1
Minas Constantinides	
<p>The business of rhinoplasty has undergone changes in keeping with increased competitive pressures locally, nationally, and internationally. Patient demands and progress in the field have abolished the “cookie-cutter” nose, with patients now requesting extensive discussions and predictions with computer photoimaging. The R-Factor Question and The D.O.S. Conversation are effective tools in rhinoplasty consultations. These tools provide patients with the clarity of what surgery can do for their lives and help patients overcome the fear produced by the overwhelming amount of information available. By helping our patients achieve the next level of success in their lives, we guarantee ourselves a busy practice filled with happy patients. The rhinoplasty consultation is the key to beginning this relationship of success.</p>	
Preoperative, Anesthetic, and Postoperative Care for Rhinoplasty Patients	7
Ravi S. Swamy and Sam P. Most	
<p>The perioperative period can be anxiety provoking for rhinoplasty patients. Patients rely on the skill and confidence of the surgeon to attain optimal results. Having an established strategy for the preoperative, anesthetic, and postoperative care of this patient population is critical to achieving a successful outcome and to ensuring a positive experience for the patient. Establishing a sincere rapport in the preoperative period and being able to properly address patient concerns regarding anesthesia helps patients develop a positive frame of mind and aids in their recovery. This presentation reviews important elements of the preoperative, anesthetic, and postoperative care of rhinoplasty patients and provides insight to making the experience a positive one for the patient and the surgeon.</p>	
Nuances of Profile Management: The Radix	15
Jacob D. Steiger and Shan R. Baker	
<p>Profile refinement is one of the most common reasons patients seek consultation for rhinoplasty. Emphasis on creating a natural-appearing nasal dorsum demands a methodic nasal and facial analysis. Areas of dorsal excess and deficiency are identified, quantitated, and considered when determining surgical goals. The radix is an essential component of the profile and is carefully assessed from the standpoint of projection and position. Height and contour are evaluated at the radix, rhinion, and nasal tip. Each component of the dorsal profile is individually classified as overprojected, underprojected, or of appropriate height. Case studies demonstrate the necessary surgical steps to create a more balanced profile.</p>	

Nasal Tip Dynamics

29

Peter A. Adamson and Etai Funk

In rhinoplasty, the nasal tip remains the most challenging anatomic region to diagnose and treat. This article presents a new concept, the M-arch model, to better understand the functional and aesthetic anatomy of the tip. This M-arch can be lengthened or shortened, or left as is, to establish the basis of ideal nasal length, projection, and rotation. Additional suture, incisional, excisional, and grafting maneuvers can be performed in a graduated fashion to further refine the M-arch, including the lobule and soft tissue of the nasal base. A full description of the M-arch model and its application is presented, and representative results are illustrated.

Endonasal Suture Techniques in Tip Rhinoplasty

41

Stephen Perkins and Amit Patel

Suture modification techniques have long served as reliable methods to surgically improve nasal tip contour by allowing control of width, projection, and rotation during rhinoplasty. Tip abnormalities characterized by a wide or broad shape are particularly amenable to such techniques. In the senior author's hands (SWP), the endonasal double-dome tip-sculpting technique has become a workhorse for the correction of the wide tip complex. When combined with additional techniques, the double-dome technique allows for the correction of various abnormalities falling under the umbrella of a broad tip (ie, boxy, bifid, bulbous, trapezoid, amorphous), while still adhering to the tenets of modern rhinoplasty philosophy. The authors present a paradigm for surgical planning, along with a series of case studies highlighting the capabilities of various suture techniques performed with the endonasal approach.

New Concepts in Nasal Tip Contouring

55

Dean M. Toriumi and Mark A. Checcone

The authors introduce the concept of favorable shadowing of the nasal tip surface. Contouring the nasal tip is an advanced concept in rhinoplasty. Several tip altering techniques exist, but proper selection of an appropriate technique or combination of techniques first requires understanding of the impact of manipulating underlying tip structure on nasal surface topography. Frequently, maneuvers that narrow the domes, inappropriately create a pinched or unnatural-appearing nasal tip. Many of these tip-narrowing techniques act to lower the caudal margin of the lateral crura below the cephalic margin and decrease support along the junction between the tip and alar lobule. The nasal tip skin can then collapse on this structure, creating a visible line of demarcation between the tip and alar lobule. Patients will describe their operated nasal tip as having the appearance of a round ball or bulbous tip, even though their nasal tip may be narrow. This pinched appearance is due to the shadowing that isolates the nasal tip, creating a bulbous or pinched look to the nasal tip. Maneuvers such as dome sutures, lateral crural strut grafts, repositioning of the lateral crura, and alar rim grafts can create a favorable tip structure to support the underlying skin envelope. Using the methods described will enable the surgeon to focus less on narrowing the nasal tip and more on creating favorable shadowing of the nasal tip.

Grafting in Rhinoplasty 91

Michael J. Brenner and Peter A. Hilger

Advances in grafting techniques have provided the basis for a paradigm shift in rhinoplasty in which purely reductive techniques have been largely supplanted by structurally sound framework surgery. Proficiency with autologous cartilage grafting allows the rhinoplasty surgeon to achieve superior nasal definition and durable aesthetic outcomes by building a stable nasal framework that resists the contractile forces of healing responsible for delayed nasal airway compromise and aesthetic distortion. Cartilage grafts may be used to reposition, augment, or reconstitute nasal structure after cartilaginous resection and recontouring. The authors present various grafting techniques that are reliably used to sculpt the nasal framework in rhinoplasty, with emphasis on the relevant anatomy, nomenclature, and clinical indications for each approach. Judicious use of these methods results in predictable rhinoplasty outcomes with enhanced aesthetics and function.

Functional Rhinoplasty 115

David W. Kim and Krista Rodriguez-Bruno

The complete rhinoplasty surgeon must possess an understanding of functional nasal airway obstruction. An increasingly sophisticated grasp of the pathophysiology of fixed nasal obstruction has led surgeons to develop and refine surgical techniques aimed toward alleviating nasal valve insufficiency. This article reviews an assortment of techniques within nasal valve surgery, highlighting the underlying pathophysiology, anatomy, and technical considerations.

Cleft Lip Rhinoplasty 133

Jonathan M. Sykes and Yong Ju. Jang

Many surgical approaches and techniques to repair cleft nasal deformities have been described. Because the presenting patient with a congenital deformity is young, the surgical plan must account for patient growth and surgical scarring. The surgeon should understand the pathophysiology of the deformity and have a systematic surgical plan. This article describes the classic nasal abnormalities associated with clefting of the lip, and outlines surgical techniques and timing used to minimize these deformities.

Complications in Rhinoplasty 145

J. Jared Christophel and Stephen S. Park

The surgical maneuvers employed in aesthetic rhinoplasty can result in unforeseen structural complications that lead to an unsatisfied patient. Many of these problems arise years after the primary surgery and include both aesthetic and functional losses. Contemporary rhinoplasty should always be designed with long-term perspective and an eye on possible untoward outcomes. This article discusses the anatomic and physiologic basis of rhinoplasty complications with a focus on primary rhinoplasty principles that will prevent their formation.

Tissue Engineering for Rhinoplasty**157**

Deborah Watson

Tissue engineering is a rapidly evolving field of research, and its impact on clinical health care solutions can be profound. It offers a unique opportunity to bridge the gap between basic science and the application of a tissue-engineered cartilage product for patients undergoing primary and revision rhinoplasty. Autologous tissue-engineered septal cartilage can be fabricated from a small sample of septal cartilage taken from a patient. This tissue-engineered product would eventually provide the surgeon with adequate grafting material with which to complete a rhinoplasty or nasal reconstructive case without the known limitations of tissue availability and tissue quantity. An update on this technology is presented as it relates to our field.

Index**167**