

Rhinoplasty

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Procedures aimed at improving the form and/or function of the nose and associated structures.

Indications

Correction of Functional Nasal Deformities

1. Septal deformity: Deviated nasal septum, bone spurs, internal/external nasal valve deformities
2. Intranasal abnormalities: Turbinate hypertrophy, septal perforations, synechiae and intranasal pathology

Correction of Aesthetic Deformities as a Result of Congenital and Acquired (Trauma) Deformities

1. Upper nose deformities: High or low dorsal hump, lateral dorsal hump, elongated nose, thin or broad nasal dorsum, and nasal deviations
2. Lower nose deformities: Poorly defined nasal tip, nasal tip deviation, over or under projection of the nasal tip, large or asymmetrical nostrils, and excessive columella show
3. Post-traumatic deformities: Crooked nose and saddle nose deformities
4. Revision rhinoplasty: Undesired cosmetic result from prior rhinoplasty

Contraindications

1. Uncontrolled systemic illness
2. Large septal perforations
3. Unstable nasal support structures secondary to trauma
4. Multiply operated rhinoplasty patient with scarred/ avascular skin-soft tissue envelope (S-STE)
5. Heavy smoker
6. Psychological disorders: Body dysmorphic disorder, depression, personality disorders

Anatomy

Membranous septum: The portion of the septum located between the cartilaginous septum and the columella.

Nasal septum: The nasal septum is a combined bony and cartilaginous structure which separates the nasal vault into two halves, provides support to the nasal tip, and stabilizes the upper and lower lateral cartilages. The anterior aspect of the septum is cartilaginous, and the posterior and cephalic aspect of the septum is osseous. The cartilaginous septum is quadrangular in shape and is fused to the paired upper lateral cartilages dorsally and to the anterior nasal spine and maxillary crest anteriorly and inferiorly. The osseous septum comprises the bones of the vomer and the perpendicular plate of the ethmoid. The vomer bone articulates with the posterior maxillary crest. The perpendicular plate of the ethmoid articulates with the nasal bones, frontal bone, and the cribriform plate.

Septal Procedures

Caudal septoplasty: Procedures performed to address the deviated cartilaginous portion of the nasal septum to improve obstructive nasal breathing and correct cosmetic deformities/deviations and/or to harvest a section of cartilage for adjunctive grafting procedures. A large quantity of cartilage may be harvested from the central cartilaginous septum (quadrangular resection). It is paramount to leave at least a 10 mm dorsal and caudal cartilaginous strut (see Figure 52.1) for support. During revision rhinoplasty, if the septum has been previously harvested, alternative sites for cartilage harvesting include the conchal bowl of the ear and the costochondral cartilage obtained from the sixth and seventh ribs.

Septal repositioning: Repositioning of a deviated cartilaginous septum within the midline of the nasal cavity. The cartilaginous septum may be repositioned with or without cartilage resection. A mucoperichondrial dissection is initiated along the inferior aspect of the cartilaginous septum to mobilize it from the anterior nasal spine and maxillary crest. The cartilaginous septum is mobilized and positioned along the midline of the nasal cavity. Alternatively and more commonly, a “swinging