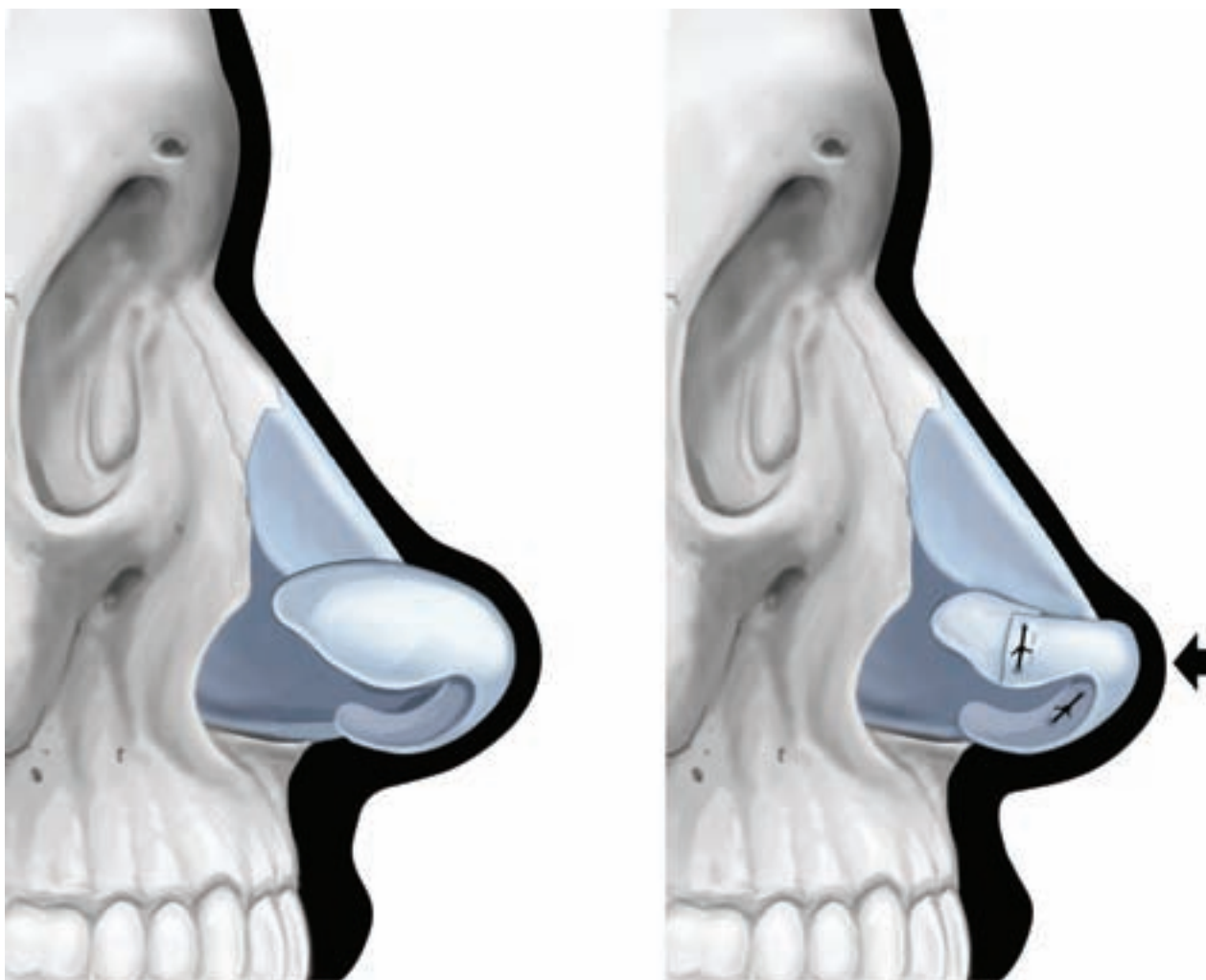


## Chapter 20. Decreasing Tip Projection

- **Indications:** Patients with increased projection of the nasal tip may be candidates for a number of specific interventions to decrease tip projection and improve facial balance (Figure 20-1). This is often not easy to achieve and a careful preoperative determination of the patient's problem should be made. Specific factors that may contribute to the increased projection include the length of either the medial or lateral crura of the lower lateral cartilages, distance from the footplates of the medial crura to the anterior nasal spine, connections between the medial crura and the caudal septum, and connections between the lateral crura and the caudal border of the upper lateral cartilages.
- **Markings:** No specific markings need to be made preoperatively. However, a well-thought-out plan for surgery should be created.
- **Approach:** Maneuvers to decrease projection of the tip are best addressed with an open approach. Via an endonasal approach, the hemi- or full transfixion incision will disrupt the connections between the medial crura and the caudal septum. Continuing the mucosal incision laterally as an intercartilaginous incision will further disjoin the lateral crura from the caudal margin of the upper lateral cartilages. For the open approach, a standard incision is made across the waist of the columellar skin and extended into bilateral rim incisions for optimal exposure of the components of the nasal tip.

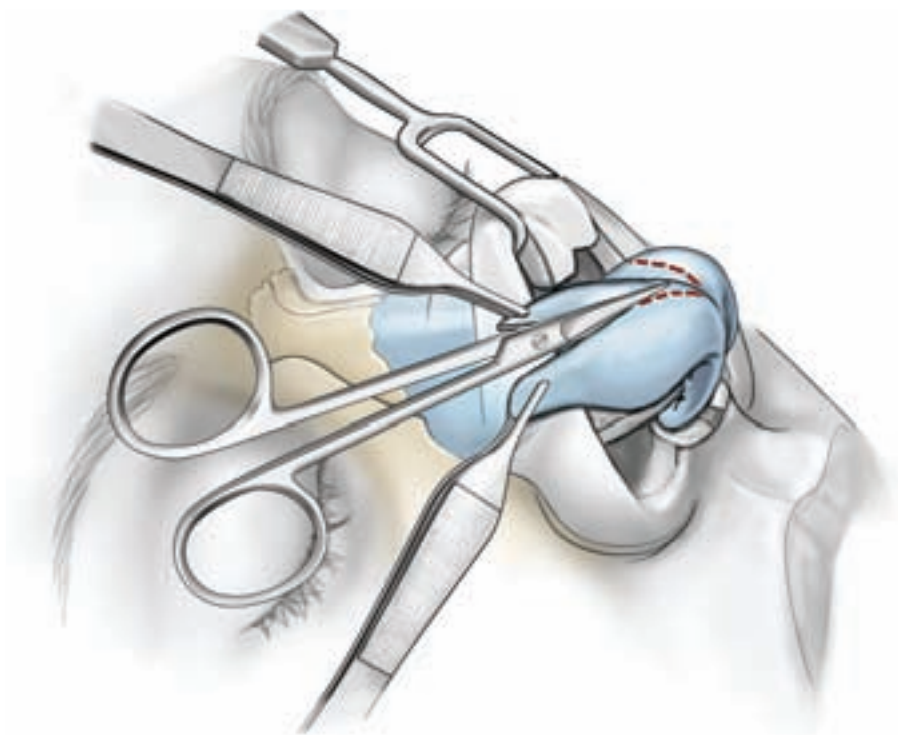


**Figure 20-1.** Overprojected nasal tip and its subsequent correction with lateral crural transection and medial crural-septal sutures.

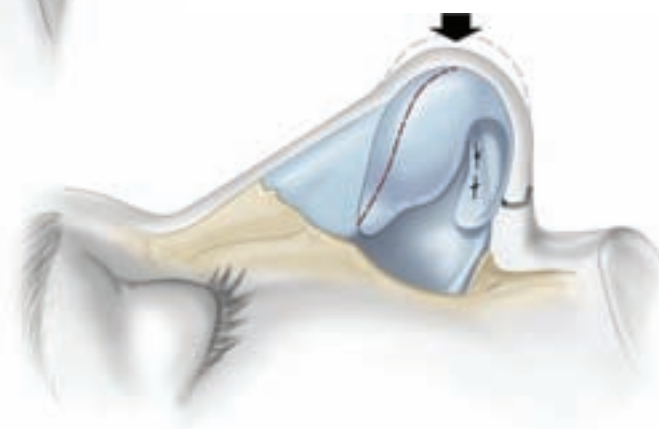
- **Techniques:** To decrease tip projection, it is important to address the anatomic structures that contribute to support of the nasal tip. These include the skin over the lower lateral cartilages, the position of the lower lateral cartilages themselves, the fibrous attachments between the lower and upper lateral cartilages, and those between the lower lateral cartilages and the caudal septum. A graduated method of decreasing tip projection is recommended as described below.<sup>1,2</sup>
  - **Medial/middle crural release:** For minimal deformity, release of ligaments and placement of sutures between the middle crura and caudal septum will set back the lower lateral cartilage complex to a certain degree. If further retrusion is necessary, alternate maneuvers will be required.
  - **Cephalic trim:** Excision of a portion of the cephalic margin of the lower lateral cartilage will further disrupt support of the nasal tip (Figure 20-2). Following detachment of the tip from the more superior structures, projection is left to the length and strength of the lateral cartilages. A medial crural-septal suture may be used to secure the tip in a more posterior position. (Figure 20-3).
  - **Septal extension graft (see Chapter 23):** A septal extension graft can be used as a stabilizing structure to which the tip can be sutured to reinforce the desired degree of projection.
  - **Crural transection:** Shortening of the lateral arms of the lower lateral cartilages will reduce the projection of these elements of the nasal tip. This is accomplished by freeing the cartilage from the skin and nasal mucosa, transecting and overlapping the lower lateral cartilage, and resuturing the ends in their overlapped position (Figure 20-4). Cartilage transection to decrease tip projection may be done at the level of either the medial or lateral crura. The lateral crura are frequently addressed before the medial crura because they provide a greater contribution to tip support in many patients. Loss of tip projection may increase alar flaring, and this is addressed after the tip is in its final position. If alar flaring is present, an alar resection may be necessary.
- **Postoperative management:** A single Steri-strip placed down one sidewall, across the columella, and back up the other sidewall suffices as a dressing to hold the repositioned columella in place.
- **Pitfalls:**
  - Deprojection of the nasal tip may make the dorsum appear too high requiring dorsal reduction.<sup>3</sup>
  - Alar retraction may occur following trim of the cephalic border of the lower lateral cartilages.
  - Alar flaring may result from decreasing tip projection. If this occurs, it should be addressed at surgery.
- **Tips:**
  - A careful preoperative examination should attempt to identify the anatomic structure(s) most responsible for the increased tip projection.
  - If alar retraction is noted following trim of the cephalic margins of the lower lateral cartilages, the excised piece of cartilage may be preserved and used to bolster the remaining lower lateral cartilage. A pocket is dissected beneath the upper border and the excised piece sutured back under the remaining portion with interrupted 5-0 PDS suture. This serves to stiffen the support of the alar rim and blend with the upper lateral cartilage.

## REFERENCES

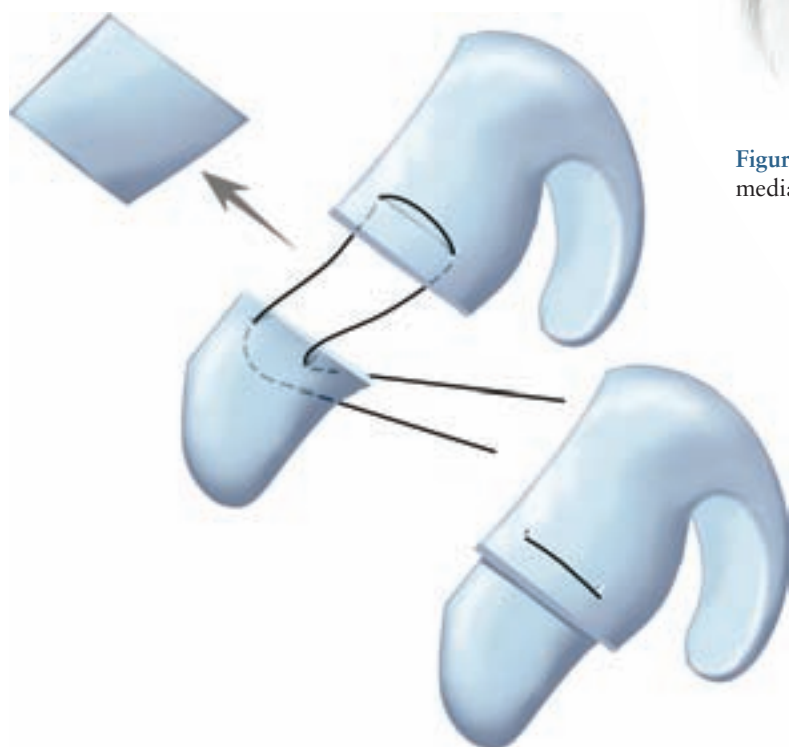
1. Rohrich RJ, Muzaffar AR. Primary rhinoplasty. In: Achauer BM, Eriksson E, Vander Kolk C, et al., eds. *Plastic Surgery: Indications, Operations, and Outcomes*. Volume 5. St. Louis, MO: Mosby; 2000:2631–2672.
2. Tebbets JB. Shaping and positioning of the nasal tip without surgical disruption: A systematic approach. *Plast Reconstr Surg*. 1994;94(1):61–77.
3. Guyuron B. Dynamic interplays during rhinoplasty. *Clin Plast Surg*. 1996;23:223–231.



**Figure 20-2.** Resection of the superior border of the lower lateral cartilage.



**Figure 20-3.** Deprediction of the nasal tip by suturing the medial footplates.



**Figure 20-4.** Resection of the lateral crura and overlapping the transected ends.