

# Chapter 22. Decreasing Tip Rotation

- **Indications:** Patients with increased upwards rotation of the nose present with a short nose and an excessive amount of nostril show (Figure 22-1). Fortunately, this is not one of the more commonly encountered problems. Analysis of the face involves lateral inspection of the nasolabial angle. As stated earlier, the normal nasolabial angle for women is approximately 100 degrees to 105 degrees and that for men is 95 degrees to 100 degrees. Another important measurement is the nasofacial angle, which lies between the dorsal nasal line and the facial plane. Here, the values are roughly 36 degrees for males and 34 degrees for females.
- **Markings:** No specific markings need to be made preoperatively. However, a well-thought-out plan for surgery should be created. A closed or open approach

may be favored for counterclockwise rotation of the nose.

- **Approach:**

- As with the under-rotated nose, the skin over the lower lateral cartilages must be undermined to free the cartilage from forces that serve to restrict desired movement.
- Conservative resection of the cephalic portion of the lower lateral cartilage serves to address the excess volume commonly seen in these patients. By performing a full transfixion incision with the closed approach, the two major contributors to the nasolabial angle can be addressed, namely the caudal septum and the anterior nasal spine. Rarely are the middle crura of the lower lateral cartilage a significant contributing factor.

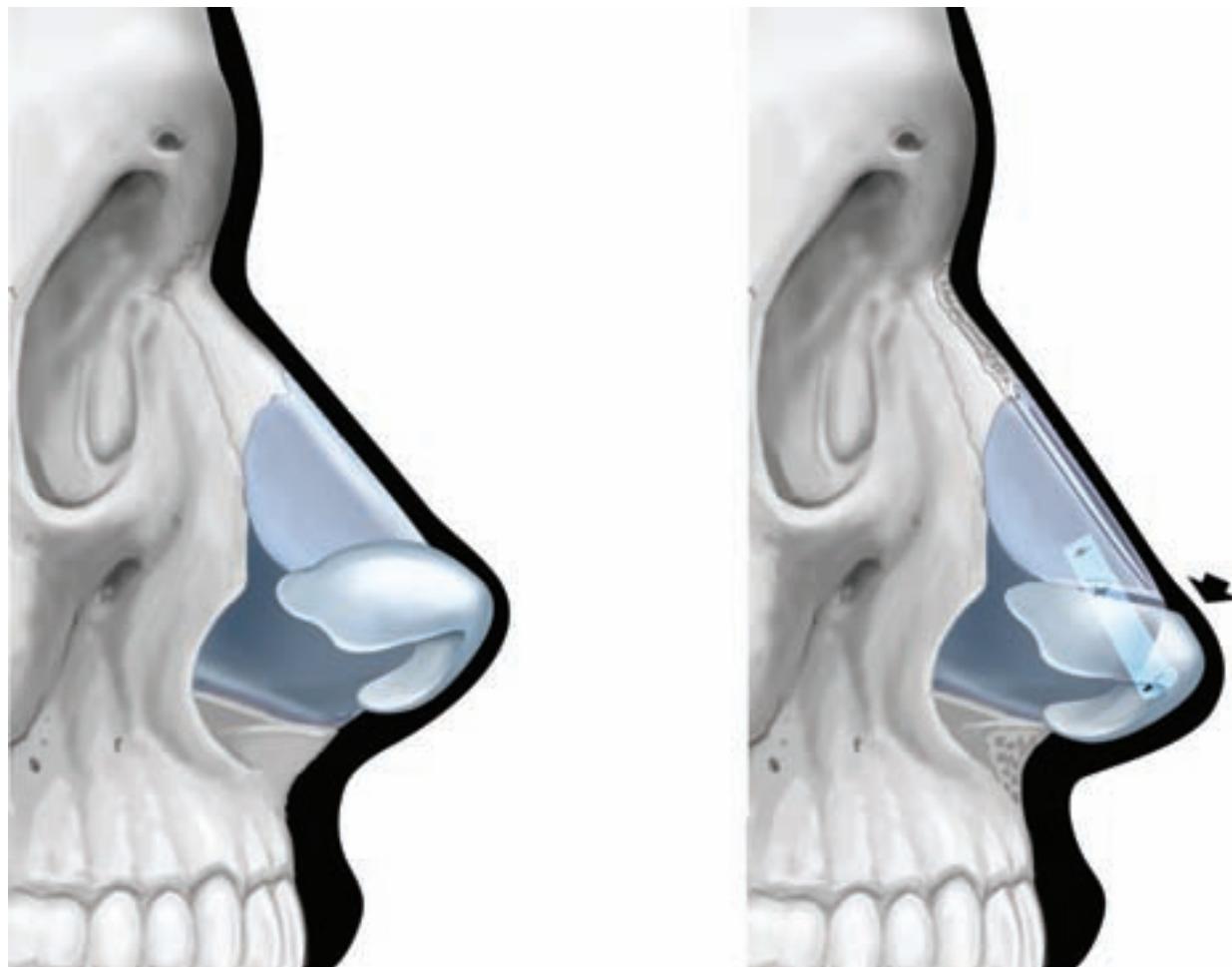
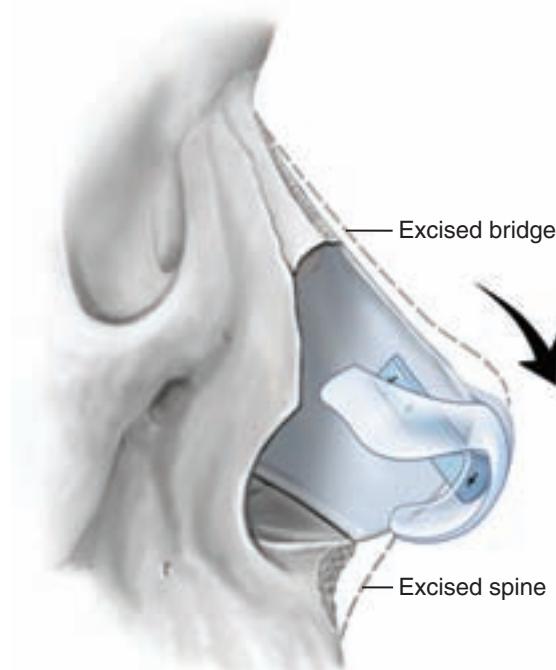


Figure 22-1. Over-rotated tip and its correction.

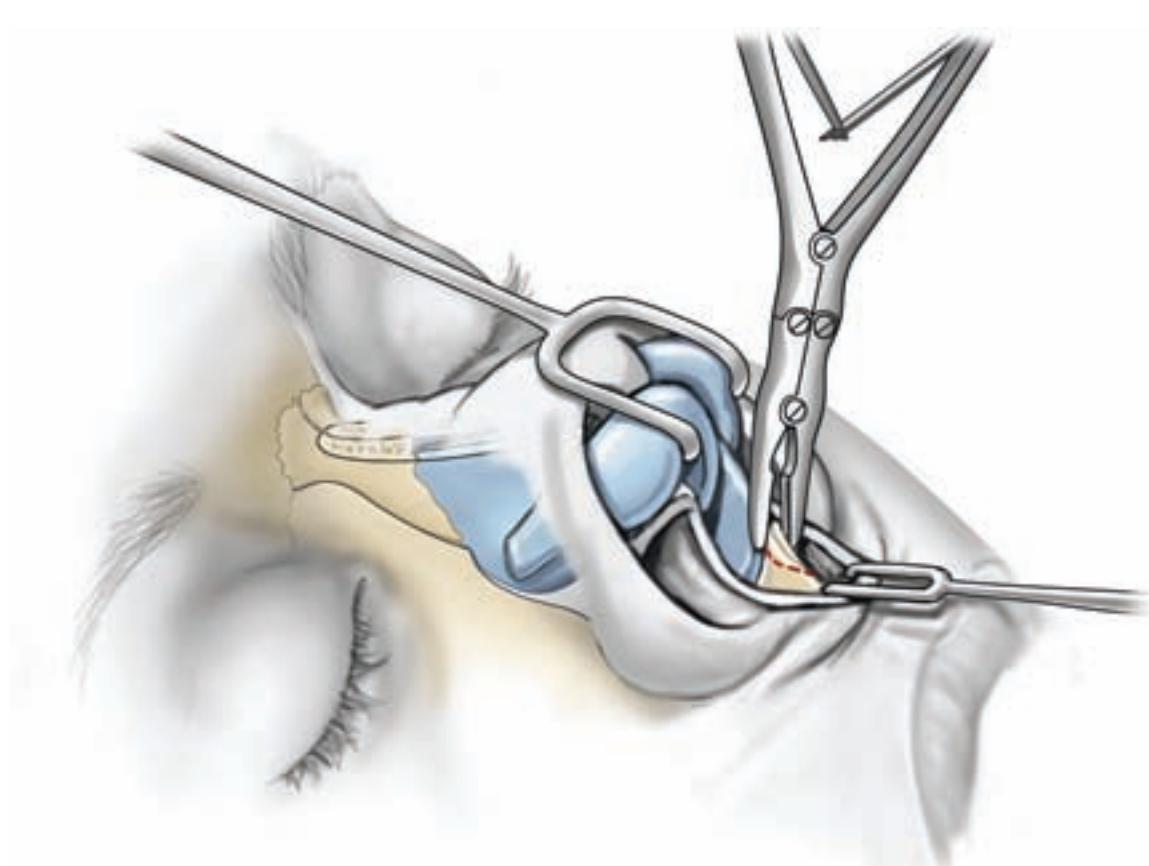
- The lower lateral cartilages are freed of their attachments to (1) the upper lateral cartilages with a limited cephalic trim, (2) the caudal septum by performing a transfixion incision, and (3) the piriform aperture via a vertical incision in the region of the sesamoid cartilages. A septal extension graft of cartilage harvested from either the septum or the rib and fixed to both the dorsal septum and medial crura will serve to push the tip inferiorly and derotate the nose (Figure 22-2). Septal cartilage is ideal as ear cartilage is often not strong enough and costal cartilage tends to warp. A 0.5-mm PDS foil may help reinforce weak cartilage and reduce warping.
  - Separation of the lower lateral cartilages from each other in the midline and dissecting the intervening loose tissue will enable visualization of the caudal septum. To make room for the rotated medial crura of the lower lateral cartilages, the posterior aspect of the caudal septum may also need to be resected. This will also decrease the nasolabial angle.
  - Proceeding inferiorly to the maxilla will identify the anterior nasal spine. With a closed approach, a hemi- or complete transection incision allows similar exposure of these structures. Alternatively, a limited, midline gingivobuccal incision can be used. A prominent nasal spine that produces an obtuse nasolabial angle can be de-emphasized by shortening its length or deepening its anterior surface with a rongeur (Figure 22-3).
  - Additionally, one or more sutures from the caudal septum may be passed to more anterior points on the lower lateral cartilages to direct these structures more posteriorly.
- *Postoperative management:* A single strip of tape 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:*
- Clockwise rotation of the nasal tip may cause the nostrils to flare outward. If warranted, this can be corrected with limited bilateral resection of the alar base.
  - The dorsum will need to be evaluated after clockwise rotation because it may require reduction to maintain aesthetic balance.
- *Tips:*
- Incremental progression will guide the amount of rotation needed to maximize the aesthetic result.<sup>1,2</sup>
  - As the nasal tip rotates inferiorly, the dorsum may become more prominent and may need to be reduced as described earlier.

## 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.



**Figure 22-2.** Clockwise rotation of the nasal tip by excision and graft placement.



**Figure 22-3.** Reduction of the anterior nasal spine with a rongeur.