

Chapter 26 . Lengthening the Short Nose

- **Indications:** The short nose can be a challenging problem to fix (Figure 26-1). As mentioned in previous sections, manipulation of the radix may aid in changing nasal length. A shallow radix can be deepened, which will move the nasion superiorly and therefore, increase nasal length. Additionally, if the superior dorsum of the nose is low, a graft will also cause the nasion to move superiorly and increase nasal length. If the tip is over-rotated, decreasing tip rotation will increase the length of the nose. However, when the nasion is normal or in cases of a severely short nose, additional procedures are necessary.
- **Markings:** No markings are necessary, but careful analysis and treatment planning is necessary to achieve an optimal result.
- **Approach:** A graduated approach to nasal lengthening is recommended. Because the soft tissue will need to allow the tip to rotate in an inferior direction, wide skin undermining is performed.
- **Technique:** The lower lateral cartilages are released from their attachments to the upper lateral cartilages and the caudal septum. The mobile tip is now rotated in an inferior direction.¹ A septal extension graft may be used to stabilize the tip in its new position. In more severe cases, aggressive techniques can be performed like tongue-in-groove septal extension grafts. A cartilage graft is shaped into three pieces: two septal extension grafts and a columellar strut graft. The septal extension grafts are placed at the dorsal septum and extend anteriorly between the middle crura. A columellar strut is also placed. The columellar strut can be sutured to the cantilevered extension grafts to fix the tip in its desired position (Figure 26-2).² For additional

projection, tip grafts may be placed. The dorsal hump may become apparent as tip rotation decreases.³ The beneficial effects of nasal lengthening can create unintended negative effects on other aspects of the nose. Derotation and lengthening of the tip will lower the nasal tip relative to the dorsum. Dorsal reduction can be done, if indicated, after the tip is in its new position. Additionally, alar flaring may occur with decreased tip rotation and if so, will need to be addressed.

- **Pitfalls:**
 - This technique frequently requires sizable amounts of cartilage, and a rib harvest is frequently necessary for this reason.
 - The cartilage may warp compromising the result.
- **Tips:**
 - Cartilage should be carved equally on both sides to avoid asymmetry.
 - Perichondrium should be removed from the graft material.
 - Undermining the skin should be wide enough to ensure that the cartilage complex will not be under tension in its new position.
 - .25 or .5 mm PDS foil may be used to reinforce grafts and reduce warping.

REFERENCES

1. Gunter JP, Rohrich RJ. Lengthening the aesthetically short nose. *Plast Reconstr Surg.* 1989;83:793.
2. Guyuron B, Varghai A. Lengthening the nose with a tongue and groove technique. *Plast Reconstr Surg.* 2003;111:1533.
3. Hamra S. Lengthening the foreshortened nose. *Plast Reconstr Surg.* 2001;108:547.



Figure 26-1. A. Lateral view of patient with short nose and decreased tip projection. B. Postoperative view of patient after nasal lengthening with anterior septal extension grafts and a columellar strut graft.

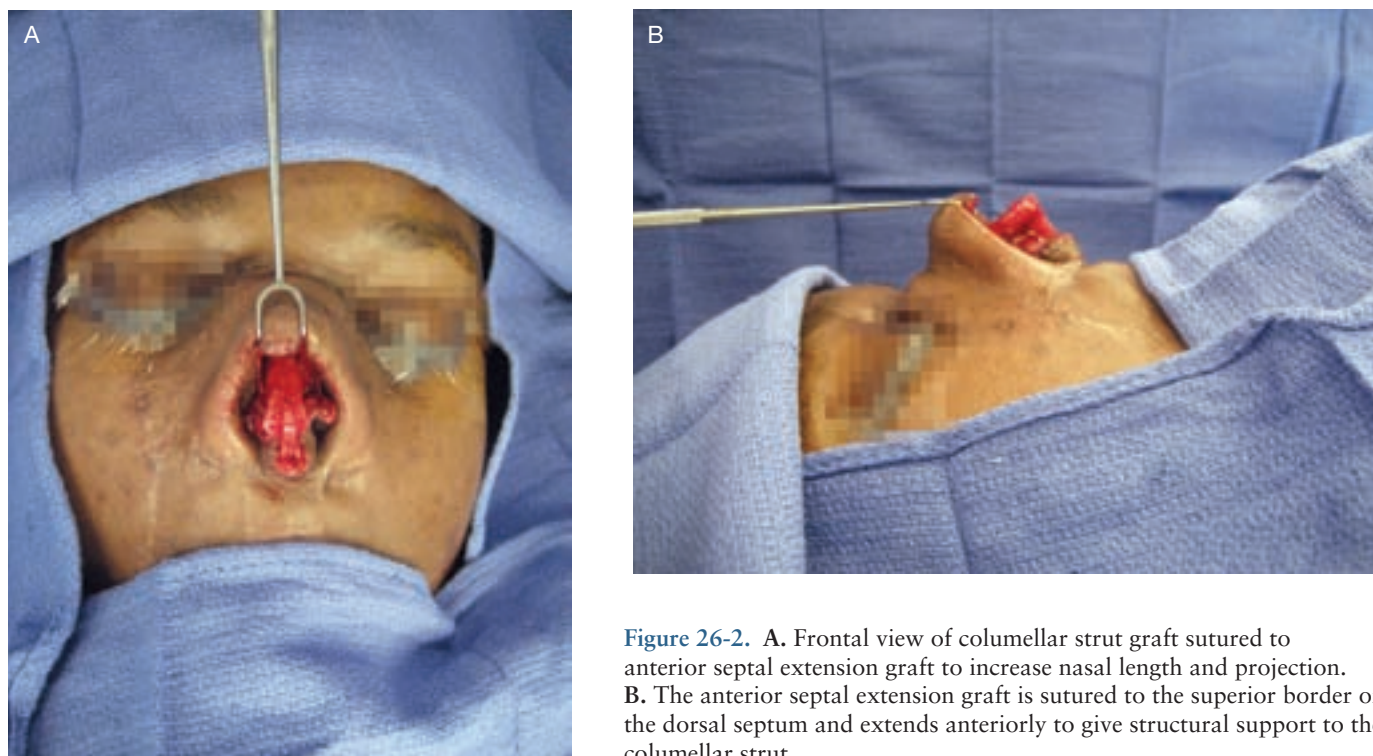


Figure 26-2. A. Frontal view of columellar strut graft sutured to anterior septal extension graft to increase nasal length and projection. B. The anterior septal extension graft is sutured to the superior border of the dorsal septum and extends anteriorly to give structural support to the columellar strut.