Endonasal placement of spreader grafts in rhinoplasty
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Spreader graft placement is indicated to: (1) correct internal valve collapse; (2) bridge and strengthen a long, narrow middle vault in patients with short nasal bones; (3) correct a lack of dorsal support of the lateral nasal walls; (4) widen the middle one-third of the nose; (5) straighten or stabilize a high dorsally deviated septum; and (6) create straight dorsal aesthetic lines (figure 1). Additionally, the spreader graft can be placed to extend past the anterior septal angle as a caudal extension graft to lengthen a short nose.

Placement of an endonasal spreader graft begins with the infiltration of 1% lidocaine with 1:50,000 epinephrine into the submucoperichondrial plane along the dorsal cartilaginous and osseous septum. Next, a 4- to 5-mm vertical incision is made approximately 2 to 3 mm caudally to the internal valve. A Freer elevator is placed through the inci-

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Figure 1. Pre- (A) and postoperative (B) photographs show the aesthetic change in the symmetry of the dorsal lines in a woman who received a left-sided endonasal spreader graft to correct a middle vault collapse.
sion and used to create a pocket that extends just past the osseocartilaginous junction (figure 2). The pocket should be made only 1 to 2 mm wider than the width of the Freer elevator to create a snug pocket for the spreader graft; too large a pocket will predispose the graft to slipping. If a septoplasty is being performed concurrently with spreader graft placement, a bridge of mucoperichondrium should be left attached to the septum at the inferior edge of the spreader pocket. It is preferred that the septoplasty dissection and the spreader graft pocket remain unconnected. The grafts are then fashioned from harvested cartilage.

After the creation of bilateral pockets, the graft is placed by grasping the cartilage at its distal tip with a pair of DeBakey forceps (figure 3). The graft is grasped at its distal edge to ensure that its leading edge is not bent or broken during placement. The graft should fit snugly into the pocket. Countertraction is provided during placement by having a surgical assistant retract the mucoperichondrial flap laterally with a tiny double-pronged hook. Immediately following placement, the lateralizing effect of the spreader graft can be visualized as an increase in the angle of the internal nasal valve as the upper lateral cartilage flares away from the septum.

A critical factor for the success of the operation rests with maintaining the connection between the upper lateral cartilage and the dorsal septum. The spreader graft fits into the angle between the upper lateral cartilage and the septum and exerts a cantilever effect. After graft placement, the incisions are closed with two interrupted 5-0 chromic sutures.

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