Extracorporeal Septoplasty for the Markedly Deviated Septum

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Objective: To describe a technique of extracorporeal septal reconstruction to correct the markedly deviated nasal septum.


Results: Of the 2119 patients, 2 cohorts were available for review. From January 1, 1981, to July 31, 1987, the author performed the operation on 459 patients. Fifty-seven complications (12%) occurred, with irregular contour of the dorsum or saddling noted in 38 (8%). Twenty patients (4%) elected to have revision septoplasty. From January 1, 1996, to December 31, 1996, the author supervised residents performing extracorporeal septoplasty in 108 patients. Fourteen postoperative complications (13%) occurred, with dorsal irregularity noted in 12 (11%). Eight patients (7%) elected to have revision septoplasty.

Conclusions: Extracorporeal septal reconstruction is an important surgical option for the correction of the markedly deviated nasal septum. Fixation of the straightened and replanted septum at the nasal spine and dorsal septum border with the upper lateral cartilages is essential. Spreader grafts for stabilization of the internal nasal valve and dorsal onlay grafts to prevent dorsal irregularity are strongly encouraged.

Arch Facial Plast Surg. 2005;7:218-226

The nasal septum has a decisive influence on the form and function of the nose. This dual aspect is often neglected in the evaluation and surgical correction of the deviated septum. The implications of nasal septal deviation are also frequently underestimated during the correction of the crooked nose. Severe nasal septal deviations usually arise as a result of nasal trauma, previous surgery, or congenital malformation. These cases are characterized by a massive deformation in all levels of the septum with consecutive blockage of 1 or both airways.

Classic septrhino-plasty techniques are not usually capable of reliably correcting severe nasal septal deformities. As early as the 1950s, King and Ashley and Perret suggested that the complete septum should be removed and corrected in such cases. The author began performing extracorporeal septoplasty in the early 1980s. In the past 20 years, the functional and aesthetic results have been evaluated constantly and the technique has been revised with the goals of improving and standardizing the procedure.

A cartilage and bony septum deformed in all 3 levels was a regular occurrence in patients with unilateral cleft lip and palate deformities. The unilateral cleft lip and palate deformity typically presented with the following nasal deformities: shortened columella on the cleft side, asymmetric and displaced nasal tip, asymmetric retrodisplaced nostril, displaced lateral crus, flattened ala, and, most important, to correction of the nasal septum, deflection of the caudal edge of the septum and anterior nasal spine to the non-cleft vestibule.

The traumatized nose also presented with a cartilage and bony septum with deformities in all 3 levels of the nasal septum. These usually were caused by a torn cartilage, which in time caused a deviation. If the fractured cartilage healed in the wrong position, angled deformities often appeared that were difficult or impossible to correct using classic techniques.