Integrated Septal Extension

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Letter to the Editor

Dear editor of the Aesthetic Plastic Surgery Journal, one of the most laborious Rhinoplasty issues has been nasal tip projection and rotation control [1].

Nasal tip projection and its maintenance are considered a critical key to the suit result. The tip projection lies in some support elements such as medial crura length, domal approaches, columellar strut, and caudal septal extension [2-6].

The Septal Extension Graft (SEG) introduced by Byrd et al. [7] in 1997, and its three variations, is a successful method for treating tip [1,8-10]. Moreover, with the refinements proposed by Toriumi D [11,12], and Davis R [13], it has gained worldwide popularity for its versatility and consistency. Two options for SEG fixation are available concerning the caudal septum: Overlapping placement using retention sutures or end-to-end placement using sutures in eight and to the septal dorsum above, through two cartilage expanders (“spreader grafting”) for direct articulation with caudal L-Strut septal cartilage (tongue-in-groove) providing a very stable attachment [14-16].

The author has proposed modifications to the SEG shape to address some of the issues presented by this technique [11,17,18]. Since 2019, the author has employed a new design SEG (Figure 1) in an appropriate fixation, to all structural open Rhinoplasty with the graft placed in a cephalic-caudal and anterior-posterior plane, to avoid rotation and maintenance of the tip position. A precise nasolabial angle, projection of the tip, and the infratip lobule definition seem to be obtained by the customized design of the graft. This integrated SEG (Figure 1) aim to reach an appropriated tip rotation and projection, avoiding tip deviation in a long-term result. The author believes that obtained better esthetic results, mainly at the supratip point, after using the integrated SEG due to the design of the angle pre-defined by the graft. An SEG is best performed with septal cartilage due

Figure 1: Integrated Septal extension graft. (A): measurements of SEG. (B): lateral view of SEG position and fixed (in blue) in side-by-side with septal L-strut (in grey). (C,D). Trans-operative lateral and coronal views of the integrated SEG arrangement with L-strut caudal septum.
to its size, flexibility, and resistance to longitudinal compression and shape deformation. The integrated SEG of the septal cartilage provides structural support for the central part of the nasal tip without the volume or instability associated with many other treatment strategies. It can be used to expand scarred or non-compliant nasal skin while preventing unwanted tip rotation due to high closure tension and/or post-operative contracture.

This newly designed SEG and its fixation has shown a promising approach to the nasal tip, achieving suitable and reproducible results, mainly in cases where tip projection and rotation are mandatory as well as to deviated caudal septum. This new SEG design plays an essential role in the surgical armamentarium of modern Rhinoplasty.

References


