Commonly Used Flaps for Cutaneous Reconstruction of the Nasal Distal Third

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Cutaneous defects of the nasal tip and ala represent a common reconstructive problem and, as such, surgeons should be familiar with the available reconstructive techniques to confront these defects. Although the literature is rife with local reconstructive possibilities, mastery of a handful of the more common options will serve the reconstructive surgeon well. The goal of this article was to discuss our preferred flaps for reconstructing cutaneous defects of the nasal distal third, reviewing the indications of each and providing video documentation of our surgical approaches.

The bilobed flap is ideally suited for defects of the central or lateral tip that are 1–1.5 cm in diameter and spare the alar margin. (See Video 1 [online], which displays the bilobed flap for reconstruction of a 1 cm cutaneous defect of the lateral nasal tip.) The flap is typically based laterally, although descriptions of medially-based flaps do exist.1 As with most transposition flaps, the bilobed flap has the potential to create contour abnormalities such as pincushioning or trapdooring, particularly in patients with thick, sebaceous skin.2 Matching the diameter of the primary lobe precisely to that of the defect (ie, not oversizing it) is fundamental to minimize the occurrence of contour abnormalities, although it is not entirely preventive.

Defects up to 2.5 cm of the distal nose can be effectively managed with the dorsal nasal flap. (See Video 2 [online], which displays the dorsal nasal flap for reconstruction of a 1.5-cm midline supratip defect.)

It is typically applied to defects cephalad to the tip-defining points and >1 cm from the alar rim.3 However, in selected cases we have successfully used this flap for more distal defects, provided that the flap is designed sufficiently large and is transposed under nominal tension to minimize inadvertent elevation of the nasal-free margins.

If indicated, we have also performed concomitant resection of the nasal dorsum to help achieve this goal (Fig. 1).

For lateral defects involving the nasal ala, the nasolabial flap is a staple in our armamentarium. (See Video 3 [online], which displays alar reconstruction using an interpolated nasolabial flap and articulated alar rim graft.) We perform the nasolabial flap in a staged, interpolated fashion for these defects, with pedicle division performed approximately 3 weeks after the initial transfer. We generally avoid single-stage nasolabial transposition flaps for alar reconstruction because they may efface the alar-facial sulcus, resulting in noticeable aesthetic deformity. Of note, the reconstructed ala typically requires additional structural support to prevent notching and collapse.2 Our preference is to use conchal cartilage as an articulated alar rim graft. (See Video 4 [online], which displays surgical sequence demonstrating conchal cartilage harvest for structural grafting.)

The paramedian forehead flap is one of the most versatile reconstructive options and can yield excellent aesthetic outcomes, as the skin of the forehead blends suitably with that of the distal nose. (See Video 5 [online], which displays reconstruction of a large, multisubunit defect of the distal nose with a paramedian forehead flap.) It is our reconstructive modality of choice for larger, complex defects—particularly those that traverse nasal subunits. Depending on the reconstructive needs, the flap can be performed in 2 or 3 stages, with the latter incorporating an intermediate stage for additional contouring or structural cartilage grafting.4

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PATIENT CONSENT
The patient provided written consent for the use of his image.

Disclosure: Dr. Marcus receives royalties for intellectual property from Stryker for the SmartLock Hybrid MMF and royalties from Thieme Medical Publishing and KLS Martin. No funding was received for this article. The other authors have no financial interest to declare in relation to the content of this article.

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Fig. 1. Preoperative (A–C) and 11-month postoperative (D–F) results of the use of a dorsal nasal flap to resurface a large tip defect after resection of a prior skin graft. The patient also had a prominent dorsal hump, which was reduced during reconstruction.

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