

## Commentary Article

# Letterbox Technique for Columella Reconstruction with Forehead Flap

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## Introduction

The nasal columella is an important aesthetic entity of the mid-face, and a significant aesthetic impact results from its loss [1]. Different regional flaps have been proposed for big defects or the entire subunit reconstruction [2].

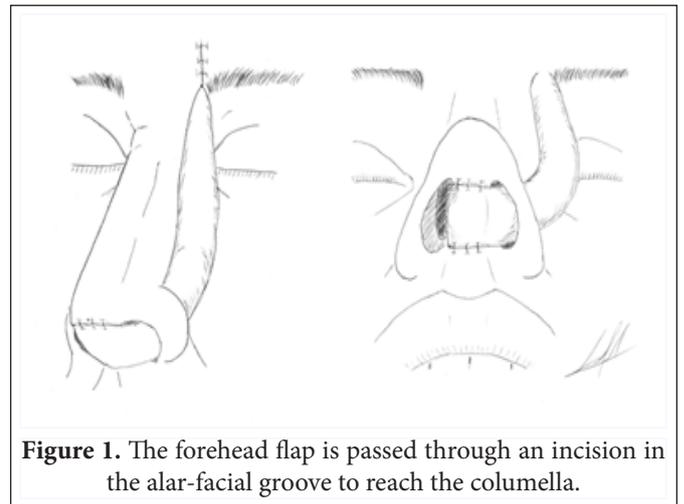
The forehead flap offers abundant tissue and colour match to re-surface the columella. However, the design should provide sufficient length because the flap has to overlap the whole nasal contour to reach the columella. This can be achieved extending the design into the hairline, or prolonging the incisions through the brow, in order to lower the pivot point [3, 4]. We hereby report a modification of the technique for columella reconstruction with forehead flap that allows it to reach the columella easily, so the two maneuvers aforementioned are not necessary.

We use the conventional design of the paramedian forehead flap, avoiding the inclusion of hairy scalp. Afterwards, an incision is placed in the most cranial part of the alar-facial groove of the ipsilateral side, and the flap is passed through this incision as a letterbox into the nasal vestibule. In this manner, the distance between the pivot point and the defect is reduced, and the flap can reach the defect straightforwardly.

The extra length of the flap obtained with this technique allows to fold the distal end onto itself to supply both external cover and internal lining of the columella. In addition, as the flap passes into the interior of the nose, it can be used to repair an internal lining defect of the ala.

In columella reconstruction, the forehead flap may be the first choice when the defect is part of a larger defect that includes the nasal tip [5]. Nevertheless, complex extension of the flap is required to reach the columella, increasing the risk of tip necrosis (especially in smokers) and making the surgery more difficult [3,4].

The letterbox technique results in a shorter distance between the pivot point of the flap and the defect; in this way the necessity



**Figure 1.** The forehead flap is passed through an incision in the alar-facial groove to reach the columella.

of extending the flap is reduced, avoiding a hairy columella in patients with short forehead. The only drawback is the scar left in the procedure, but it is not visible as it is placed in a groove. Therefore, we believe that our modification could be worthwhile to make the surgery easier and more secure.

## References

1. Buetow KW (2007) Construction of the congenitally missing columella in midline clefts. *J Craniomaxillofac Surg* 35: 287-292.
2. Ayhan M, Sevin A, Aytug Z, Gorgu M, Erdogan B (2007) Reconstruction of congenital and acquired columellar defects: clinical review of 38 patients. *J Craniofac Surg* 18: 1500-1503.
3. Faris C, Vuyk H D (2011) Reconstruction of nasal tip and columella. *Facial Plast Surg Clin North Am* 19:25-62.
4. Frederick M (2008) *Nasal Reconstruction: Art and Practice*. (1stedn) St Louis., Mosby Elsevier; 2009.
5. Mavili M E, Akyürek M (2000) Congenital Isolated Absence Of The Nasal Columella: Reconstruction With An Internal Nasal Vestibular Skin Flap And Bilateral Labial Mucosa Flaps. *Plast Reconstr Surg* 106: 393-399.



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