

Columellar O to T Flap for Surgical Management of a Basal Cell Carcinoma of the Distal

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Please cite this paper as:

Namazi MR, Parvizi MM, El Husseini M. Columellar O to T Flap for Surgical Management of a Basal Cell Carcinoma of the Distal. *World J Plast Surg.* 2026;15(2):1-3.

doi: 10.61186/wjps.15.2.**

DEAR EDITOR IN CHIEF

The reconstruction of the nasal tip is widely identified to be a complex challenge due to the convex topography of the region and the limited access to adjacent tissue of adequate laxity¹⁻⁴. Because of the thick, sebaceous nature of the nasal tip skin and its adherence to the underlying cartilaginous framework, recruiting local tissue carries a high risk of displacing the alar rim, a free margin that is susceptible to distortion from tension vectors^{1,2}. Therefore, the primary goal of reconstruction in this area is to make use of a design where opposing rotational forces recruit tissue of similar nature medially, effectively neutralizing tension and thus preventing distortion of the nostrils or deviation of the nasal tip^{2,4}.

The O-to-T principle utilizes bilateral tissue advancement to convert an oval defect into a T-shaped closure while making use of the superior horizontal limb and inferior columella in nasal reconstruction, rather than excising of Burow's triangles at the edges of the incisions. Beyond the nose, the flap classically known as the A-to-T flap is frequently employed in the eyebrow and suprabrow forehead, the upper lateral and infranasal upper lip, and the mid-helix of the ear but involves the excision of Burow's triangles.

This technique is suitable for lesions with circular or oval defects up to 1.5 cm in diameter on the nasal tip or supratip. The technique begins with the identification of the lesion (basal cell carcinoma in this case), which is centered on the nasal tip or supratip area. After identifying the appropriate margin for excision, two curvilinear incisions are marked starting from the 6 o'clock position of the lesion at the columellar junction and extending superiorly toward the nasal dorsum to form a vertical curvilinear ellipse around the defect. At the 12 o'clock position, a horizontal third incision is marked perpendicular to the bridge of the nose to join the vertical lines. To provide the necessary mobility for tissue movement, this superior horizontal incision is extended 3 mm lateral to the edges of the primary curvilinear incisions on both sides. This horizontal configuration facilitates the recruitment of adjacent tissue, allowing the flap to be advanced inferiorly to cover the primary defect while ensuring a tension-free closure and preserving the anatomical symmetry of the nasal tip (Figure 1).

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Received: ***

Accepted: ***



Fig. 1. Pre-operative view: An ellipse is marked to encompass the lesion and a 4 mm margin. The superior tip is blunted and extended horizontally 3 mm lateral to each side of the ellipse. Designs involving removal of burrow triangles are in this way avoided. The area marked with a red 'X' indicates the conventional design that was excluded in favor of the columellar O to T flap



Fig. 2. Post-operative view: natural nasal contour is preserved while the distortion of the alar rim or asymmetric displacement of the nasal tip is avoided. Incision lines are hidden along the columellar junction and nasal dorsum

Incisions are made perpendicular to the skin surface. The ellipse marked by the two incisions marked is excised. The horizontal incision is made. The flaps border undermining is performed deep to the nasalis muscle and just above the perichondrium to maximize blood supply and minimize lymphatic congestion. The two flap edges are then advanced

medially into the defect. Because movement is shared between two flaps, tension on any single vector is reduced.

The flap edges are advanced medially into the defect, utilizing buried vertical mattress sutures to ensure precise wound edge eversion (Figure 2). This eversion is critical for counteracting scar

contraction forces, thereby preventing scar inversion and the trapdoor effect often associated with curved incisions.

This technique has excellent aesthetic results, preserving the natural nasal contour while preventing distortion of the alar rim or asymmetric displacement of the nasal tip. The flap design strategically camouflages scars within the natural topography of the nose; incision lines are hidden along the columellar junction and nasal dorsum.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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