

DERMATOLOGICAL SURGERY

THE HINGED TURNOVER FLAP IS A VERSATILE AND SINGLE-STAGED OPTION FOR FULL-THICKNESS DEFECTS OF THE NASAL ALA AND SOFT TRIANGLE.

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Background: Full-thickness defects of the nasal ala and soft triangle present unique reconstructive challenges. Lining, structural support, and cutaneous covering must be restored to preserve inspiratory function while recreating a complex and delicate topographic contour. Even small defects are aesthetically devastating if not repaired appropriately. These small wounds often demand extensive multi-staged repair and seem excessive and counterintuitive from the patient's perspective. Single-staged flaps for reconstruction of small full-thickness wounds of the ala and, particularly, the soft triangle are lacking in the literature.

Observation: We present a series of 5 patients with full-thickness wounds of the nasal ala and soft triangle ranging from 5 to 13 millimeters repaired with the hinged turnover flap. The flap uses skin of the nasal sidewall to recreate both inner and outer aspects of the ala. It is designed long enough to restore the contour of the alar rim, then folded back upon itself to recreate the external surface of the ala. In broad defects a cartilage strut was placed within the flap to prevent inspiratory collapse. The flap is raised above the periosteum starting at superior apex, with dissection continuing until a few millimeters of tissue attachment remains at the superior portion of the wound. The "hinge" or base of the flap includes part of the transverse and alar nasalis muscles as well as skin and subcutaneous tissue. The secondary defect involving the nasal sidewall is closed primarily and the flap is sutured into place. Cosmetic and functional outcomes were uniformly excellent, with the exception of one patient developing mild alar notching due to insufficient flap length, which serves as an important teaching point.

Key Message: The hinged turnover flap serves as a reliable single-staged, local flap for repair of challenging full-thickness defects of the nasal ala and soft triangle.