



## Alar Rim Graft Insertion; Simple Approach

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### Clinical Image

Placement of the alar rim graft is often performed to prevent or correct alar concavity and stability. Troell et al. [1] described the alar rim graft in 2000. Alar (external valve) collapse may be iatrogenic or can occur as a consequence of ageing or trauma. Mostly, an autologous cartilage graft is inserted as an underlay graft to the alar rim [2]. Several techniques are available to reestablish normal contour. If a depressed area is anticipated, dermal grafts can be used to fill the defect and soften contour irregularities [3]. In 20 consecutive cases at the end of procedure an incision in midway of alar rim and inferior to the deformity of alar rim has been made. There after by a 2 mm osteotome a tunnel is made that cross the deformity up to tip and a cartilage graft-15-20' 2 mm in size- is inserted to the tunnel to correct it. This graft is used in one alar rim unit as needed. After that the concerned deformity was improved at moment as expected and it was not necessary to close incision. The first sign of improvement achieved just after insertion as improvement of notching and rim stability, also after one month and six month of follow up there is no alar deformity or graft displacement and hematoma, wound infection or so and no need for alar revision. There was a case for hump residual that required revision. Alar disharmony is one of the most common abnormalities observed after a rhinoplasty this article describe the new insertion trick for alar rim graft [4]. The traditional Techniques for alar rim deformity improvement have been proposed and used successfully. Two techniques for correction of the deformed alar rim had been described to lower the alar rim, the internal skin of the vestibule was dissected away from the areolar tissue and brought down as a flap. A segment of cartilage was taken from the septum or upper portion of the lower lateral cartilage. The cartilage graft was placed in the rim and the vestibular mucosa was folded over the graft and sutured to hold the cartilage in place. Rising of the alar rim has been accomplished through direct excision to raise the rim and to make the nostril longer or wider [5]. The majority of patients who undergo rhinoplasty would benefit from the alar rim graft, and this study demonstrates a steady increase in its use. Placement of an alar rim graft results in elongation of the short nostril, correction of the alar concavity, widening of the nostril, and slight caudal transposition of the alar rim [6]. Full-thickness defects of the alar rim can be challenging to repair and often require the use of multi staged interpolated flaps. Alar notching is a known complication of these procedures even after cartilage batten grafts have been placed to support the alar frame work [7]. The effect of different rhinoplasty maneuvers on alar retraction remains to be elucidated. Although it has been tried to determine the etiology and treatment of alar retraction based on a series of specific rhinoplasty maneuvers [8]. The "Articulated" Alar Rim Graft (AARG) is a modification of the conventional rim graft that improves treatment of secondary alar rim deformities, including Postsurgical Alar Retraction (PSAR). Unlike the conventional alar rim graft, the AARG is sutured to the underlying tip complex to provide direct stationary support to the alar margin, thereby enhancing graft efficacy, the AARG can eliminate

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Figure 1: Making a pocket to insert alar rim graft as traditionally is done.



**Figure 2:** Steps of incision, making pocket and insertion of alar rim graft with 2<sup>mm</sup> osteotom.

PSAR in a majority of patients. The AARG is also highly effective for prophylaxis against alar retraction and in the treatment of most other contour abnormalities involving the alar margin. Moreover, the AARG requires comparatively little graft material, and complications are rare [9].

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