## Reconstructive surgery using rib cartilage graft in septorhinoplasty.

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Abstract

Background:

Rhinoplasty is one of the most popular cosmetic procedures in all over the world. Rib cartilage graft is used as an alternative to septum cartilage, with the advantage of providing sufficient amount of cartilage even for primary or revision Rhinoplasty. In this study, we will use rib cartilage graft in primary and revision Rhinoplasty cases.

The rib cartilage graft will be obtained from different anatomical sites, depending on patient gender while using different techniques.

The patient nasal angles and lines will be measured before and after the operation with recording the patient satisfaction in functional and cosmetic manners.

Methodology:

Reconstruction Rhinoplasty cases performed from January 2011 to December 2016 were chosen from the King Abdullah Medical Center KAMC in Saudi Arabia. A total of 18 patients (10 females and 8 male) were selected from ENT clinic, with the age above 18 years and all of which must presented with nasal deformity and nasal obstruction.

Patients Seeks for cosmetic Rhinoplasty was excluded from our study. Rib cartilages were used in all patients as the graft of choice for the Rhinoplasty procedure and different technique were used as well. Results: A total of 18 cases; 8 (44.4%) male patients, 10 (55.6%) female patients, All of them are Middle East patients. They are presented with different nose presentation, majority of them had dorsal saddling (77.8%) and deviated nose (66.7%). and they are complaining of poor breathing and Aesthetic look. Regarding the nasal angles (Nasofrontal, Nasolabial angle, and Tip deviation) have been measured pre and post-operative as well. And for all the angles, their P Values are statistically significant. Pre-op Nasofrontal angle, Mean  $\pm$  SD (135 $\pm$ 7.8). P value is < 0.001 which is significant. Pre-op Nasolabial angle, Mean  $\pm$  SD (86.4  $\pm$  9.5). Post-op Nasolabial angle, Mean  $\pm$  SD (97.9 $\pm$ 7.7). P value is < 0.001 which is significant. Pre-op Nasolabial angle, Pre-op tip deviation, Mean  $\pm$  SD (1.9 $\pm$ 2.3). Post-op tip deviation, Mean  $\pm$  SD (0.47 $\pm$ 0.73).

Conclusion:

We conclude that autogenous rib cartilage grafts are an outstanding material in septorhinoplasty whe structural, functional, and aesthetic problems are present.