Deep Temporalis Fascia Blanketing Supra- SMAS (superficial musculoaponeurotic) layer Versus Sub-SMAS layer dissection and preservation in preventing nasal dorsal irregularities

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Abstract: Rhinoplasty is a complex surgical procedure used to correct nasal deformities. The main aim of this procedure is to improve the function and aesthetic aspect of the nose, enhancing facial harmony and the symmetry of the nose. It is considered as one of the most challenging operations in the field of Otolaryngology practice. In primary rhinoplasty, the two common techniques used are sub superficial musculoaponeurotic system (Sub- SMAS) layer dissection and Supra SMAS deep Temporalis Fascia (DTF) blanketing for prevention of dorsal nasal irregularities. The aim of this study is to compare the irregularity of the nasal dorsum after rhinoplasty between (DTF) blanketing supra SMAS layer and (Sub-SMAS) layer dissection and preservation in primary rhinoplasty.

Methods: The study was approved by institutional review board (IRB). A retrospective chart study was conducted on (64) patients who presented to (ENT Out Patient Department) and underwent primary rhinoplasty at tertiary care, Saudi Arabia. Patients were divided equally into two groups, 50% (32) patients underwent (DTF) blanketing and 50% (32) patients underwent (Sub-SMAS) layer dissection. Data was collected by observing the preoperative and postoperative dorsal aesthetic lines symmetry outcomes. Data were tabulated using Microsoft excel sheet, SPSS used for Statistical analysis. Comparison between groups made by Student’s t-test and Chi square test for categorical values.

Result: Postoperative nasal dorsal aesthetic line symmetry observation score was given for both the groups ranging from (1, 2, 3, 4, 5), 1 means 0% marked dorsal aesthetic line symmetry, 2- 25% symmetry, 3- 50% symmetry four 75% symmetry and 5-100% symmetry. It was seen that 25.8% of patient with temporalis fascia blanketing supra SMAS layer had a score (5), 12.9% had score International Journal of Scientific & Engineering Research Volume 8, Issue 9, September-2017 185 (4), 38.7% score (3), 12.9% score (2) and 9.7% had score (1), while 36.4% of patient with (Sub-SMAS) layer dissection had score (5), 33.3% score (4), 24.2% score (3) and 6.1% score (2). The mean score in patients before (DTF) blanketing supra SMAS was 2.25 and 3.32 after the surgery, while the mean score in patients (Sub-SMAS) layer dissection group was 1.97 and 4 after the surgery. The postoperative dorsal nasal irregularity observation showed that 87.1% of patient with (DTF) blanketing supra SMA Slayer, have a regular nose while 12.9% of patients have irregular nasal dorsal. 87.9% of patient with (Sub-SMAS) layer dissection have a regular nasal dorsum. While 12.1% of them have irregular nose as the t test was significant.

Conclusion: (Sub-SMAS) layer dissection is superior to the (DTF) blanketing supra SMAS layer in the nasal dorsal aesthetic lines outcomes, while there is no significant difference in nasal dorsal regularity between the two groups. SubSMAS layer dissection is superior to the supra SMAS(DTF) blanketing as observed in this study, and also offers the advantage that it can be obtained from the same operative site rather than obtaining TF from a different site.

Biography:

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