The outcome of Rhinoplasty with or without Temporalis fascia in adult patients at King Abdullah Medical City

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In rhinoplasty surgery, deep temporalis facia are used in different techniques for solving the problems of middle osseocartilaginous vault irregularity, radix depression, saddling of the nose. The use of temporalis fascia in rhinoplasty as a blanket over the osseocartilaginous framework is very effective technique in solving a lot of postoperative unsatisfaction reasons of the patients. Some of these reasons are nasal irregularities, radix depression and saddle nose. Deep Temporalis fascia is a fascia that covers the temporalis muscle and measures 10x12 cm. In this study we used temporalis fascia with diced cartilage, or gort-ex prosthesis. Gort-ex is one of the alloplastic materials named polytetrafluoroethylene, which is widely used. The cartilages were taken either from autologous rip or concha. Several other cases have temporalis fascia without any of the mentioned method depending on the patient nasal condition. This paper represents our experience with temporalis facial graft in primary and revision septorhinoplasty either with close or open techniques.

Study design & Methods: A retrospective review was done on 69 patients (51 male and 19 female) and the age range from (19-60) years, cases varied between 31 patients underwent septorhinoplasty with temporal is facia and 38 patients without temporal is facial. The corresponding author performed all operations over a period of 3 years at the Department of Otorhinolaryngology, Head and Neck Surgery at King Abdullah Medical City, Makkah Almokarama Saudi Arabia.

Results: The nasofrontal angle improved in (10) cases who underwent diced cartilage with temporal facia (7) case, gortex with temporal facia (3) cases, the angel decreased 6.60, p- value=0.008. No statistically significant differences were seen in patients who underwent rhinoplasty with temporalis facia as a camouflage no. (21) Cases nor rhinoplasty without temporalis facia no. (38) Cases. Follow up (3) years we observe one patient only from (31) case complaint of nasal dorsal irregularity about 3.2% when we use temporalis facia , but 11 patient from 38 cases complaint of irregularity in the dorsum about 28.9% of all cases without temporalis facial. According to patient satisfaction score (1-5), Score 1 patient not satisfied but score 5 patients with Excellency in satisfaction. We divided the patients into 2 groups 31 cases with temporalis facia, the second group 38 without temporalis facia. From the aesthetic patient satisfaction view in the first group 1 patient not satisfied from 31, (3.2 %) but in the second group 6 patients not satisfied from 38 cases, (15.5%). From the functional view (breathing quality) score in the first group 31 patient satisfied from 31, (100%) but in the second group 38 patients satisfied from 38 (97.4%).

Conclusion: Excellent results were achieved using temporalis facia either as a blanket, with diced cartilage graft, with alloplastic graft (as a new innovation no one in the literature use this technique) or for radix augmentation, so the nasofrontal angel was reduced, no dorsal nasal irregularity happened to most of our patients, also most of our patients satisfied aesthetically and functionally.

Biography
Areej Awad Alzaidi is a senior medical student At UMM Al-Qura University and faculty of Medicine. At the age of 24 years he is a member of research Center at King Abdullah Medical City and co-author of 6 articles in Current Contents. He has presented papers International and local conferences and is interested in medical education and research.

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