

Columellar Scars in Middle Eastern Patients Are They Exceptionally Obvious?

Abstract

Objective: To re-investigate the findings of previous researchers regarding columellar scars visibility results on Middle Eastern patients.

Method: Case analysis report and review of the medical literature on the said topic.

Subject: Eighty seven Middle Eastern patients who underwent primary open rhinoplasty and/or septorhinoplasty.

Results: Only 9 patients (10.3% of patients) considered their scar unsatisfactory and 2 patients (3.4 %) considered as objective failure when assessed by another rhinoplastic surgeon.

Conclusion: This study concludes that columellar scars in Middle Eastern patients can be highly unnoticeable if optimum technique of wound closure will be used.

Key words: Open Rhinoplasty; Columellar Scar.

**Sami Al Harthy,
Ahmed Al Arfaj**
Department of Otolaryngology,
Head and Neck Surgery,
King Abdulaziz University Hospital,
Riyadh, Saudi Arabia.

Address for Correspondence:
Dr. Sami Al Harthy
King Abdulaziz University Hospital,
P.O. Box 245
Riyadh 11411, Saudi Arabia.
Email: samiharthi@gmail.com

Funding: None
Conflicts of interest: None declared
Ethical approval: Not required

Introduction:

Open rhinoplasty gained progressive popularity in the last 40 years. It was Goodman in 1970, who published the first results on open rhinoplasty approach (1,2,3). This surgery leaves a scar on the columella; the scar is less noticeable in Caucasian patients. However, on reviewing the literature on Middle Eastern patients' columellar scar analysis, we found a significant controversy regarding the columellar scars' visibility following open rhinoplasty from being highly unnoticeable (4) to being unsatisfactory in high percentage of patients (5).

The aim of this study was to re-investigate the findings of previous researchers on this issue. The columellar scar was analysed subjectively by the patient himself/herself and objectively by another rhinoplastic surgeon.

Materials and Methods

Eighty seven adult Middle Eastern patients (60 males & 27 females) who have undergone either open rhinoplasty or septorhinoplasty by a senior rhinoplasty consultant from 2007 to 2009 were chosen randomly for this study. The mean age was 22 years (range from 17 to 33 years). A minimum follow up of one year before scar analysis was a requirement for them to be

considered as a subject; the gull-wing with an inverted V transcolumellar incision described by Adamson et al 1990 was used as a basis.

Scar analysis was performed primarily by the patients as to decide if the scar is unnoticeable (Grade 0), noticeable but acceptable (Grade I) or unsatisfactory (Grade II). The scar was then be evaluated by another surgeon using the same grading technique.

Results:

When the visibility of the scar was graded by the patient (Table I), 42 patients (48.3%) found their scar unnoticeable, 36 patients (41.4%) found it to be noticeable but acceptable, while 9 patients (10.3%) found their scars unsatisfactory; these results were considered as subjective failure.

Comparing male to female ratio in finding the scar unsatisfactory, there wasn't any significant difference between the two groups. (OR: 1.13[95% CI: 0.2-5.78])

When the columellar scar was studied objectively (Table II) however, 42 patients (48.3%) had almost unnoticeable scar, 42 patients (48.3%) had a noticeable scar but acceptable results and only 3 patients (3.4%) were found to have unsatisfactory scar based on the evaluator's analysis. 2 of the patients had hyperpigmented scar and one had a depressed scar.

Table I: Patient Evaluation of his/her scar visibility (subjective analysis)

Grade	No. of Patients
(0)	42 (48.3 %)
(1)	36 (41.4 %)
(2)	9 (10.3 %)

Table II: Surgeon's evaluation of Scar visibility (objective analysis)

Grade	No. of Patients
(0)	42 (48.3 %)
(1)	42 (48.3 %)
(2)	3 (3.41 %)

Discussion

The popularity of open external rhinoplasty is increasing in the Middle East. The columellar scar following open rhinoplasty is extremely well accepted in the western

community (6,7,8). However, upon reviewing the literature for the presence of unsatisfactory columellar scar in Middle Eastern patients, we found a great controversy – from being higher than expected (5) to being unnoticeable (4). Our study showed that Middle Eastern patients even though they tend to have thick, oily, slightly darker skin than that of the lighter, thinner skin patients; will yield a highly acceptable scar. None of the patients had wound dehiscence or flap necrosis.

We think that the selection of the approach in case of rhinoplasty should depend mainly on the degree of deformity present, and the experience of the operating surgeon. The scar of open external rhinoplasty is highly favourable and should not influence the choice of the approach. However, recommendations to improve this scar should be considered (5,6): The incision should not be placed below the medial crural feet, accurate wound approximation, use of fine sutures, avoidance of cauterization of the subcutaneous tissue and aggressive defatting (5), avoidance of tension, and inversion of the incision line (4).

This study concludes that open rhinoplasty in Middle Eastern patients will lead to unnoticeable highly acceptable columellar scar whenever optimum technique of wound closure was used.

Reference List

1. Goodman W S. External approach to rhinoplasty. *Can. J. Otolaryngol.* 1973;2: 207.
2. Goodman W S. and Charbonneau, P.A. External approach to rhinoplasty. *Otolaryngol.* 1974;84: 2195.
3. Goodman W S. Recent advances in external rhinoplasty. *J. Otolaryngol.* 1981 10: 4331.
4. Foda H M. External rhinoplasty: A critical analysis of 500 cases. *J Laryngol Otol.* 2003; 117(6):473.
5. Bafaqeeh S A. and Al Qattan, M.M. Open Rhinoplasty: Columellar scar analysis in an Arabian population. *Plast Reconstr Surg.* 1998 ;102(4):1226- 1229.
6. Adamson, P.A, Smith, O, and Tropper, G.J. Incision and scar analysis in open (external) rhinoplasty. *Arch. Otolaryngol. Head Neck Surg.* 1990;116: 671, 1990.
7. Anderson JR, Johnson CM, Adamson PA. Open rhinoplasty: as assessment. *Otolaryngol. Head Neck Surg.* 1982;90:272-274.
8. Ezon, FC. Open rhinoplasty. *Ear Nose Throat J.* 1985; 64:416-420.



Volume (14) No. 2
1 July, 2012

*The Saudi Journal
Of
Oto - Rhino - Laryngology Head and Neck Surgery*

المجلة السعودية للأنف والأذن والحنجرة وجراحة الرأس والرقبة



See page 65

The Official Publication of the
Saudi Oto-Rino-Laryngology Society

Table of Contents

Review Articles

Arabic abbreviated version of Pediatric Voice handicap index (Preliminary Study) <i>Hazem Y. Abdelwahed, Nasser H. Abdelnasser, Khalid A. Al-Mazrou.</i>	54
Role of x-ray lateral view nasopharynx in the diagnosis of subtle velopharyngeal incompetence <i>Wael Mohammad Adel Abdelkafy, Mohammad Tawfeek El Tabbakh, Khaled Abdelhamid Gad.</i>	63
Outcome of auditory neuropathy after cochlear implantation <i>Abdulmonem Al Shaikh, Hatem Ezz Edin, Alaa Abusetta.</i>	67
Surgical exposure in local otolaryngology training program " from residents own perspectives" <i>Abdulrahman Al Sanosi.</i>	73
Attitude of medical students toward otolaryngology, head and neck surgery <i>Ahmad Alroqi, Ahmad Alkurdi, Khalid Almazrou.</i>	76
Linking extraesophageal gastric reflux (EEGR) to chronic rhinosinusitis(CRS) in children: Pepsinogen study of paranasal sinus and adenoid tissue <i>M. A. Al Essa.</i>	81
Fungal sinusitis: A ten-year experience at King Abdul-Aziz University Hospital, Jeddah, Saudi Arabia. <i>Khalid B. Al-Ghamdi, A.A. Rammal, Rafat S. Sindi.</i>	86
Columellar scars in Middle Eastern patients. Are they exceptionally obvious? <i>Sami Al Harthy, Ahmed Al Arfaj.</i>	92

Clinical Cases

Bilateral peritonsillar abscess: A case report <i>Habib Hussain Merza Abdulkhaleq, Ali Hasan Alqasim.</i>	94
Osteoblastoma of the nose: A case report <i>Yahia M. Al-Qahtani, Yahia D. Al-Ahmari.</i>	96