Braz J Otorhinolaryngol.
2011;77(4):510-5.

BJORL.org

Crooked nose: outcome evaluations in rhinoplasty

Lisandra Megumi Arima[1], Leandro Castro Velasco[2], Romualdo Suzano Louzeiro Tiago[3]

Keywords:
outcome assessment (health care), patient satisfaction, quality of life, rhinoplasty.

Abstract

A crooked nose is the result of deformities that might involve the bony nasal pyramid, the upper and lower lateral cartilages, and nasal septum, causing complaints of aesthetic and/or functional nature.

Purpose: To evaluate how satisfied are those patients who underwent rhinoplasty to correct crooked nose, through the questionnaire Rhinoplasty Outcomes Evaluation (ROE).

Material and method: A longitudinal study with retrospective analysis of preoperative satisfaction and prospective analysis of postoperative satisfaction of patients who underwent rhinoplasty. ROE questionnaire was applied twice in the same visit aiming at measuring patient satisfaction in both pre and postoperative periods. Nineteen patients who underwent rhinoplasty answered the ROE.

Results: For all patients who underwent rhinoplasty, the average preoperative satisfaction score was of 24.6±11.3, while the average postoperative score was of 76.1±19.5 (p<0.0001). Average differences between pre and postoperative satisfaction scores in patients younger than 30 years of age were lower than those reported by ≥30-year-old patients (p=0.05).

Conclusion: From the Rhinoplasty Outcomes Evaluation questionnaire, it is possible to demonstrate the impact that rhinoplasty to correct a crooked nose determines the quality of life of patients. Approximately 90% of patients undergoing rhinoplasty believed they achieved a good or excellent postoperative result.

[1] 3rd-year resident physician (R3) - ENT Department - HSPM.
[2] 3rd-year resident physician (R3) - ENT Department - HSPM.
[3] PhD in Sciences - Graduate Program in Otorhinolaryngology and Head and Neck Surgery - Federal University of São Paulo. Post doctorate from the Federal University of São Paulo. Attending ENT at the HSPM.
Hospital do Servidor Público Municipal de São Paulo (HSPM).
Send correspondence to: Romualdo Suzano Louzeiro Tiago - Rua Pio XII, 439, ap. 122, Bela Vista. São Paulo - CEP: 01322-030.
Tel. (5511) 3285-6824 - E-mail: romualdotiago@uol.com.br
Paper submitted to the BJORL-SGP (Publishing Management System – Brazilian Journal of Otorhinolaryngology) on October 17, 2010; and accepted on January 19, 2011. cod. 7379

INTRODUCTION

Rhinoplasty has become one of the main cosmetic surgeries performed by otorhinolaryngologists and plastic surgeons. The major indications for rhinoplasty are: cosmetic and cosmetic-functional. Cosmetic-functional rhinoplasty, or rhino-septoplasty, means the cosmetic repair of the nasal pyramid, together with surgery of the nasal septum in order to improve patient complaints associated with nasal obstruction and hyposmia. In those cosmetic-only procedures, the physician must assess the reason for which the patient wishes to be submitted to the procedure. Often times, the reason involves the need to please other people, social or professional ambition; the surgeon then has a great responsibility, which is to accept or refuse the patient's request[1]. Pre and intraoperative planning are essential in order to achieve good results; the surgeon must carefully examine the nose in order to determine which pathological condition there is and which surgical procedure is needed[2].

The crooked nose is a generic term used to define all deformities which involve the nasal pyramid deviation in relation to the facial medio-sagittal plane[3]. The crooked nose is the result of complex deformities which may involve the bony nasal pyramid, the upper and lower lateral cartilages and, especially, the nasal septum, leading to cosmetic and functional complaints[4]. The crooked nose's major component is the extremely deviated nasal septum[5]. Therefore, in order to correct the crooked nose, the nasal septum must be the treatment's target. Even in the absence of obstructive complaints, small septum deviations may impact proper nasal alignment[6]. Therefore, it is important to have a broad knowledge of the nasal anatomy and the external and internal forces which act on these structures so as to employ the many existing surgical techniques[5]. Congenital and trauma causes, and those associated with previous nasal surgeries may be present in the patient's history[2,5-8].

Most of the papers discussing cosmetic surgery bear discussions regarding surgical techniques, access pathways, complications, sequelae and reoperation rates[2,4-12]. The assessment of the intervention's final result was not very much studied under the patient's viewpoint, and such analysis is very important because patient satisfaction is the prevailing factor for surgical success[13-17].

In the recent decade, numerous have been the papers published in order to validate a reliable questionnaire to be employed in patients submitted to cosmetic surgery, with the goal of measuring patient satisfaction after the procedure[17-22]. Some instruments, such as questionnaires, which assess quality of life and self-image have become a gold standard and came to replace the simplistic way used to ask the patient whether or not he/she had noticed any improvement after surgery[23,24].

The use of broadly accepted questionnaires brings about great advantage, because it standardizes assessment and enables a comparison of different techniques; besides, it helps measuring the positive and negative effects, and to identify possible patients who may not benefit from surgery[13].

Alssarraf et al. tested and supplied an assessment tool for numerous facial cosmetic procedures, including rhinoplasty, with reliability, internal consistency and method validity[18,19]. This questionnaire is a tool the surgeon may have in order to objectively assess some qualitative variables associated with the cosmetic surgery, such as psychological, social and emotional aspects[18,19,25].

OBJECTIVE

To assess the satisfaction of patients submitted to rhinoplasty to correct a crooked nose based on the *Rhinoplasty Outcomes Evaluation* (ROE) Questionnaire.

MATERIALS AND METHODS

We studied 35 consecutive patients submitted to rhinoplasty to correct a crooked nose, with an endonasal approach. The surgeries were carried out in the Otorhinolaryngology Department of a tertiary hospital in the city of São Paulo (SP) between January of 2002 and July of 2009. The procedures were either done or supervised by the third author.

We included all the patients submitted to rhinoplasty in order to correct a crooked nose, with 12 months to 8.4 years of postoperative follow up. Patients from 17 years of age and up, had agreed to the procedure and signed a free and informed consent form when they came to our institution after telephone contact.

We excluded those patients with whom it was not possible to make telephone contact, those who did not agree with the consent form, and those who did not come to the interview (Table 1).

Table 1. Reasons why and number of patients taken off the sample.

Reason	N
It was not possible to get in touch with the patient	11
Wrong telephone number	10
Did not answer the phone	1
Did not come	5
Despite the contact and the appointment setup	4
Could not come to the hospital at the time of the data collection	1
TOTAL	16