Rhinoplasty - Analysis of the Techniques Used in a Service in the South of Brazil


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Summary

Introduction: In the rhinoplasty, as in other surgeries, an adequate exposure of the manipulated structures is essential for a positive surgical result. Various techniques are used, and these may vary, mainly, because of the anatomical alterations found.

Objective: To evaluate which are the most common surgical techniques and maneuver used in our service.

Method: Retrospective analysis of the surgical descriptions of patients submitted to the rhinoplasty in the Otorhinolaryngology Department of the Clinical Hospital - UFPR in the year of 2007.

Results: 79 patients were evaluated; in 86% of whom rhinoplasty with basic technique was performed, between 6.4% and 7.6% delivery and external rhinoplasty were used, respectively.

Conclusion: In our service we performed basic technique rhinoplasty in the great majority of the patients.

Keywords: rhinoplasty, techniques, trends.
INTRODUCTION

In the end of the twentieth century, as the facial plastic surgery began to be more appreciated, ethnical and anatomical varieties were increasingly being discussed (1). At the same time, the concepts of beauty were reviewed and the diversity of statements and anatomic variations found became crucial for the choice of the technique to be employed in each case.

The objective of this study is to evaluate the techniques and maneuvers employed in the rhinoplasty operations carried out by the Otorhinolaryngology Service of the Clinical Hospital of the Federal University of Paraná during the year of 2007, by comparing them to studies performed in other regions of the country.

METHOD

Retrospectively, the surgical descriptions of 79 patients submitted to rhinoplasty in the Otorhinolaryngology Service of the Clinical Hospital of UFPR in the year of 2007 were evaluated.

For every surgery a form was completed and it comprised specifically: access incisions; simultaneous performance of septoplasty; maneuvers on the osteocartilaginous dorsum, on the nasal tip, on the lower side cartilage; and the types of osteotomy cuts employed. In all patients, the surgeries were performed under local anesthesia with intravenous sedation.

The results obtained were organized in tables. The review included separately the kind of incision, procedures on the nasal tip, graft placement and osteotomy, on the total of patients operated, and obtained the prevailing techniques in our service.

RESULTS

The surgeries were performed by three approaches: closed (86%); delivery (6.4%); external (7.6%) (Chart 1).

As for the access incisions, the intercartilaginous incision was made in 78 (98.7%) patients, transcartilaginous incision in 7 (8.9%), marginal incision in 10 (12.7%) and transfixing incision in 76 patients (96.2%) (Table 1).

A high number of septoplasty operations was carried out (67 patients – 84.8%), simultaneously with rhinoplasty, aiming at the breathing function improvement. There was resection of the osteocartilaginous dorsum in 71 (89.9%) patients, dorsum graft placement in 4 (5.1%) patients (Table 2).

As far as the procedures performed on the nasal tip are concerned, they occurred in 47 (59.5%) patients; intermodal point was made in 26 (32.9%) patients; cephalic resection in 20 (25.3%); lower lateral cartilage weakening in 4 (5.1%); La Garde’s operation in 37 (46.8%); McIndoe in 4 (5.1%) and flaring in 4 (5.1%) There was columnar graft placement in 12 (15.2%) patients, out of whom, strut was placed in 11 (91.6%) and in 1 (8.4%) the Sheen’s shield was used (Table 4 and Chart 2).
As for the procedures carried out in the alar base, 
vestibuloplasty was performed in 6 (7.6%) patients and 
point at "8" in 10 (12.7%) patients (Chart 3).

**Discussion**

As in all surgeries, rhinoplasty demands a suitable 
exposure of the structures manipulated. Therefore, the
incisions must be selected according to the structures to be 
approached. PATROCÍNIO et al report that a specific and 
careful review of what is to be corrected is critical for a 
rhinoplasty. Tebbetts suggests we should use as many 
incisions as necessary for adequate structures exposure.

In this study, the basic technical rhinoplasty was 
mostly used in our service, covering 86% of all surgeries 
carried out. External rhinoplasty and delivery technique 
were performed respectively in 7.6% and 6.4% of the 
surgeries. Such fact differs from some national works; in 
2006, PATROCÍNIO et al reported an index of 71.1% of 
rhinoplasty surgeries with delivery and only 27.1% of basic 
technique rhinoplasty surgeries. We believe the reason for 
such difference is the target population for each study, and 
the great quantity of crossbred and negroid noses in that 
region In our service, we have found mostly Caucasian 
patients in whom the basic technique is proper for most of 
the cases.

The number of septoplasty operations (84.8%) 
simultaneous with rhinoplasty was high, aiming specifically at 
the breathing standard improvement and also serving as a 
graft material.

The lateral osteotomy was carried out in 97.5% of 
the patients, aiming at refining the osseous base and the 
closure of the roof of the nose. The osteocartilaginous 
dorsum resection occurred in 89.9% of the patients, aiming 
at the naso-frontal angle improvement; the dorsum graft 
placement occurred in only 5.1% of the patients.

Out of the procedures met on the nasal tip, the most 
used one was the accomplishment of La Garde’s maneuver 
and intermodal point (46.8% and 32.9%, respectively), 
followed by the lower lateral cartilage cephalic portion 
resection (25.3%), columelar graft (15.2%). In a study 
mentioned above, Patrocínio et al reports a greater number 
of interventions on the nasal tip; with the lower cartilage 
cephalic portion resection in 58.4% of the cases; intermodal 
point in 45.1% and columelar graft in 45.7%. Such difference 
may also be explained by regional differences because in 
crossbred and negroid noses a major number of interventions 
for a better definition of the nasal tip is required.

**Conclusion**

The rhinoplasty basic technique prevails in our 
service and therefore there is less need for techniques such 
as delivery and external rhinoplasty compared to services 
in other regions.

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