FUNCTIONAL AND AESTHETIC ASPECT IN RHINOPLASTY

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There are two indications for rhinoplasty: First, external deformities of the nose, second, disturbances of nasal function. But there is only one aim in performing a rhinoplasty: to reconstruct a nose with a normal function and with a good shape that does not look like an operated nose and gives the face a harmonic aspect.

The exterior and interior of the nose are structurally interdependent. They constitute a functional unit. Altering the exterior of the nose is seldom without effect on the interior of the nose, and thus on nasal function.

The most important task of the nose is to assure an optimal supply of air to the adjoining respiratory tract. All other functions, such as the sense of smell, and also moistening, warming, and filtering of the air are dependent upon the free passage of air through the nose. Limitation of nasal function not infrequently produces serious consequences for the whole organism. In many cases on the other hand, satisfactory restoration of nasal function cannot be achieved solely by surgery on the interior of the nose but can be assured only with the

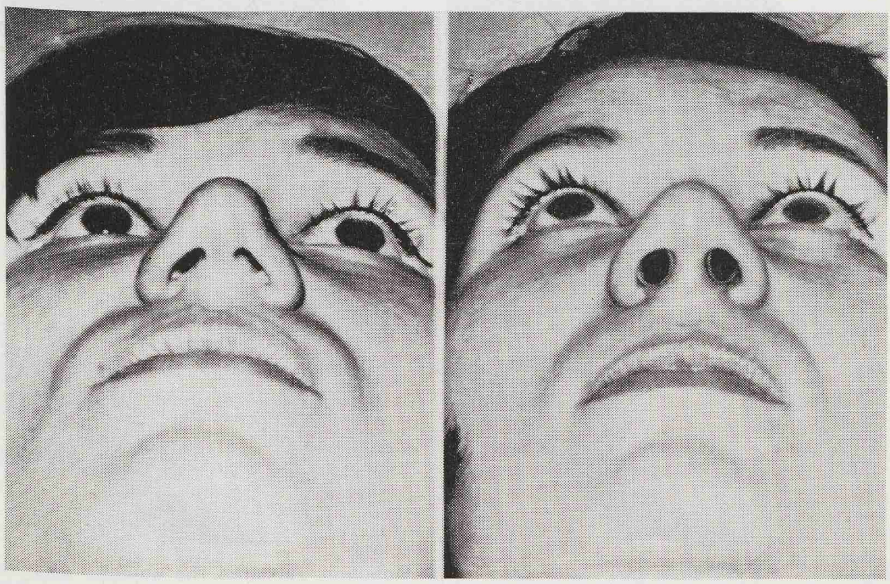

Figure 1. Before and after nasal reduction, combined with the resection of the dermocartilagenous ligament.

addition of an operation on the exterior of the nose performed when possible simultaneously.
Improperly performed rhinoplasty may cause disturbance of all nasal functions.
Figure 1 shows a young girl after a nasal reduction. The operation resulted not only in a severe stenosis of the limen nasi but also in a parrot-like nose with the tip pointing downward that gives a further impediment to nasal ventilation.
How does one avoid these deformities following cosmetic surgery of the nose? There are several factors which are responsible for a bad result:
First, the factors pertaining to the patient: such as a thick skin and the tendency to make hypertrophic scars.
Second, the factors pertaining to the technique: such as removal of too much cartilage, above all removal of too much from the lower lateral cartilages, excision of the perichondrium with the lower lateral cartilages that results in a rough area.
Third, infection.
Fourth, unattentive care in the postoperative period.
The three last factors may be influenced by the surgeon.
An exact planning of the operation helps a great deal. Our preoperative examinations usually consist of

1. inspection of the whole face and also of the internal nose,
2. rhinomanometry,
3. X-ray-examinations of the nasal sinuses to avoid overlooking a sinusitis,
4. photographs for documentation.

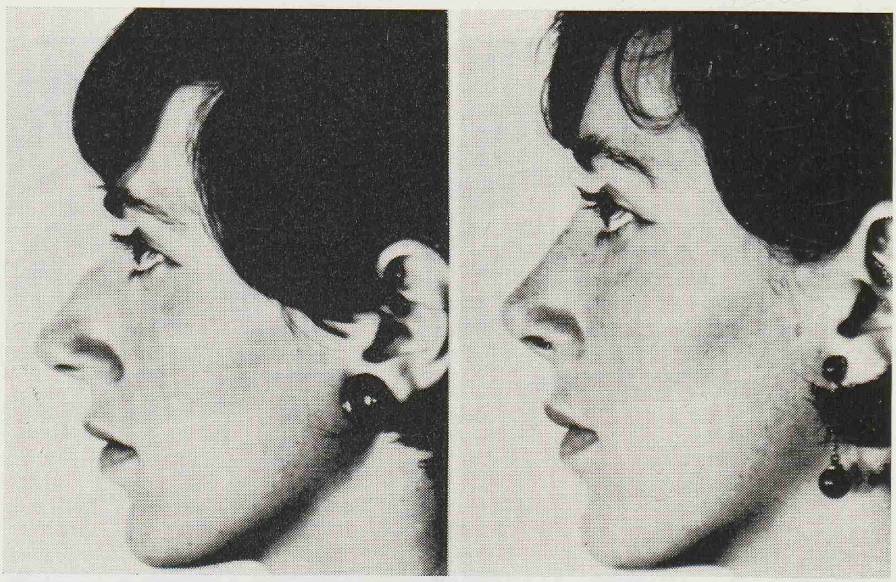

Figure 2. 26-years-old girl. Left: after nasal reduction. Remark: The stenotic area in the anterior of the nose. Right: after correction. To prevent shrinkage by scarring she was wearing an inlay after the operation for 3 months.

The rhinoplasty must be performed as untraumatically as possible. That is: leaving every tissue in its place that does not disturb the nasal function or the aesthetic aspect of the nose. Above all, it is necessary to avoid rough areas without epithelium, because these areas may not only favour infection but result also in larger scars. A careful postoperative treatment is indispensable, including examination of the internal nose and rhinomanometry. In this way an impediment of nasal function due to hypertrophic scars may be discovered in the beginning and be treated immediately.

In some cases the tip pointing downward is a great problem and is difficult to correct. Sometimes the resection of the dermocartilagenous ligament described by Pitanguy (1965) that can be found even in European noses is very helpful.

Figure 2 shows a young girl before and after nasal reduction, combined with the resection of this ligamentum.

Figure 3 is another case with a bulbous nose where the resection of this ligamentum is almost always necessary.

Another problem is the tip in congenital flat noses. In this deformity the pointing down of the tip is due to an under-development of the columella and the lower lateral cartilages. In this congenital deformity we don't hesitate to restore the nasal function as soon as possible, that is in the age of 3 or 4 years. In those cases which show a combined functional and aesthetic problem a restoration of nasal function can be achieved solely by correction of the exterior of the nose, that is raising the tip by lengthening the columella.

When performing a rhinoplasty, it is necessary to see not only the nose but to look at the face, and to construct a nose that joins harmonically in the whole face. For this reason it is sometimes good to leave a little deformity.

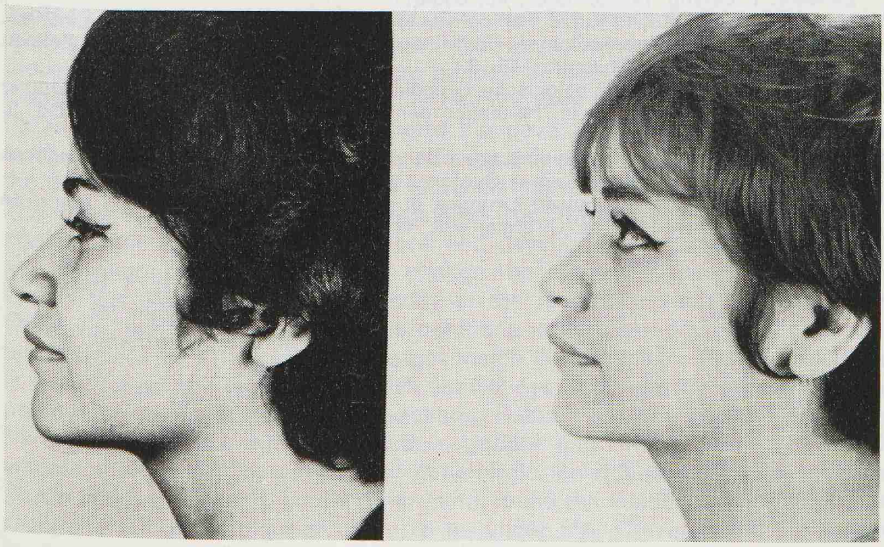

Figure 3. Bulbous nose before and after correction. This case was operated by I. Pitanguy, Rio de Janeiro.

Above all, nasal function must be reconstructed or preserved, such as in merely cosmetic surgery of the nose, because a functionally impeded nose gives seldom satisfaction, neither to the patient nor to the surgeon.

RÉSUMÉ

L'extérieur du nez aussi bien que l'intérieur, dépendant du point de vue de la structure l'un de l'autre forment une unité fonctionnelle. C'est pourquoi on doit se rendre compte que si l'on change l'extérieur du nez on transforme souvent aussi l'intérieur et ainsi la fonction du nez.
D'autre part, s'il est nécessaire de faire une rhinoplastie pour améliorer la fonction nasale, on doit très souvent changer l'air du nez. Dans ces cas on peut donner au malade un nez qui est en harmonie avec toute la face, sans l'incommoder de plus. On devrait donc dans chaque opération restaurer et la fonction et l'air du nez.
On a montré quelques cas illuminants ce problème entrelacé et on a décrit la technique de laquelle on s'était servie.

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