# THE INDICATIONS FOR A SEPTAL APPROACH IN CORRECTIVE RHINOPLASTY

**J. Willemot, Gent, Belgium and G. A. Sedee, Utrecht, the Netherlands**

Undoubtedly the technic for corrective rhinoplasty has undergone a great evolution in the last 20 years. The following three factors have in the main contributed to this development:

— this type of surgical intervention, formerly considered as basically not necessary, nowadays has gotten a broader indication because of the social development and the greater security of anaesthesia and sterility.
— the plastic surgeon does not look merely to embellish to outlines of the nose but he realises that he should not sacrifice at the same time some of its physiological functions; something which frequently happened in former days. He will try to change to the better and deficient function of the nose.
— the oto-rhino-laryngologist on the other hand while trying to restore the proper function of a nose should not leave the external aspect uncorrected, even if the patient did not ask for it.

It is evident nowadays that functional and aesthetic rehabilitation go hand in hand. We have written before, that basically it is not important who does the rhinoplasty, the oto-rhino-laryngologist or the plastic surgeon, as long as the operation is performed by the surgeon who knows all the problems which concern the internal and external nose. The completion of the knowledge that is lacking should be acquired by persons of both disciplines. Being oto-rhino-laryngologist we give our opinion in relation to this problem. We will describe schematically in three headings the indications for a septal approach as the principal "porte d'entree" in corrective nasal surgery

1. The general hypertrophy of the nose
2. The deviated nose
3. The saddle nose.

## 1. The general hypertrophy of the nose.

An operation trying to correct this feature is the type most frequently performed by the plastic surgeon.
Let us consider two possibilities:

a. The septum is normal while a marked nasal hump or projection is present. The hump can be removed together with other tissues while saving the nasal mucosa. It is undeniable that the removal of the osteo-cartilaginous roof with section of the mucosa is a bad intervention from a naso-physiological point of view. This does provoque (sometimes) a syndrome with the

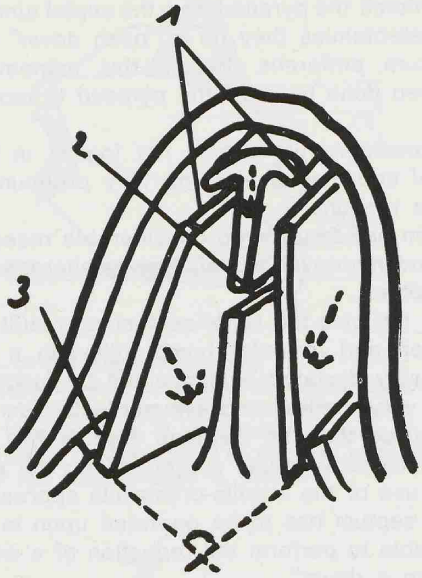


Figure 1. Technic of push down: 1. paramedian osteotomies, 2. septal resection, 3. lateral osteotomies.

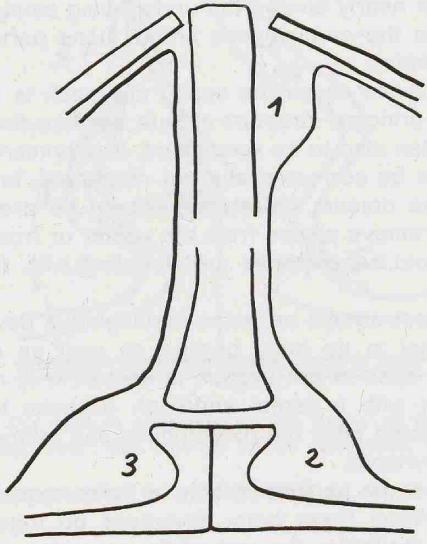


Figure 2. Frontal section of the septum showing the three tunnels created in the technic of the maxilla-premaxilla.

name "open roof syndrome" which consists of headache and a feeling of tension in the root of the nose. This is the reason why many surgeons first detach the mucosa before taking off the hump while others put back the osteo-cartilaginous piece directly after having remodeled it.

Some prefer to attack the pyramid from the septal tunnels and after having performed the osteotomies they do a "push down" of the pyramid over or in the apertura piriformis. Before this manoevre a partial septal resection has been done to allow the pyramid to move and sink (Figures 1 and 2).

Personally we consider this technic not logical in the case where the septum is normal and the nasal hump very pronounced or irregular, for the following two reasons:

— the normal septum has to undergo considerable resection with weakening of the K-area, and moreover a technical amelioration: it is filling a hole while making another.
— this technic does not give the same aesthetical result especially in a case with an outspoken and irregular hump following a trauma.

b. The septum is badly deviated accompanied by functional difficulties and the hump is not very marked and symmetrical.

Everybody will agree that the deviated septum has to be corrected. In these cases the corrective nasal surgery along the septal route (Figures 1 and 2) making use of the maxilla-premaxilla approach (Figures 3 and 4) is excellent. The septum has to be operated upon in any case. With this technic it is possible to perform the reduction of a small and symmetrical hump bij "pushing it down".

2. **The deviated nose.**

Here the septum is nearly always the underlaying cause. The malformation may be situated in the cartilaginous and/or bony parts.

a. Cartilaginous deviation.

It is clear that in these cases the septal approach is imperative because the septum is the principal structure at fault, perhaps the only one. The alar cartilages have often also to be remodeled. It is primarily the cartilaginous septum that has to be corrected and not respected. In pronounced cases a section along the dorsum (fibrotomy) cannot be prevented. Sometimes it is necessary to remove pieces from the vomer or from the perpendicular plate of the ethmoid, when these are doubling with the cartilage.

b. Bony deviation.

This in fact is almost always an osteo-cartilaginous deviation because the septum is abnormal in its bony portion as well as in its cartilaginous portion. When the base of the septum is normal, it is not logical to begin such an operation with a septal approach because the septum usually proves to be corrected after the osteotomies and following the straightening of the bony pyramid.

A septoplasty has to be performed only in those cases where the septum does not follow. When these bony deviations go together with a hump, the resection of it facilitates the rest of the operation greatly. When there is no need of resection the correction may be more difficult.

3. **The saddle nose.**

The classical method of filling out the saddle with an implant is often the only practicable method.

There is however a technic of pushing the pyramid down and lifting the

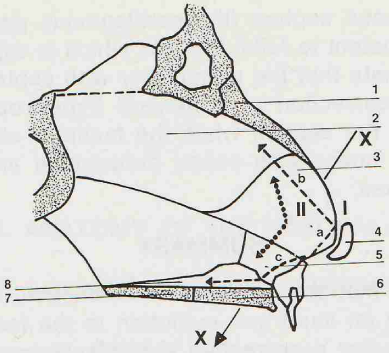


Figure 3. Lateral view of the septum showing:
I. maxilla-premaxilla approach with a. freeing of the nasal spine, b. creating of the anterior tunnel, c. creating of the inferior tunnels.
II. classical approach, 1. nasal bone, 2. perpendicular plate of the ethmoid, 3. septal cartilage, 4. alar cartilage, 5. premaxilla, 6. palatine plate of the maxillary bone, 7. horizontal plate of the palatine bone 8, vomer.

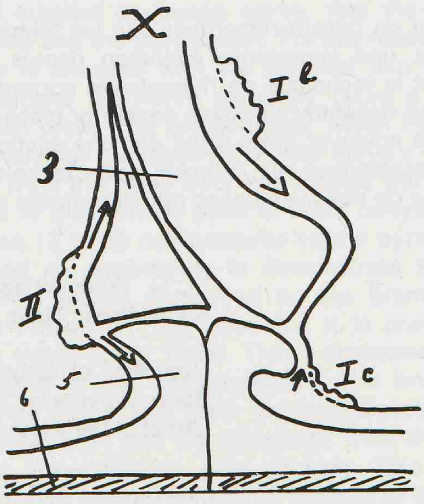


Figure 4. Section of the septum according to the arrow of the preceding figure
I. maxilla-premaxilla approach; (Ib) anterior tunnel connected, (1c) with inferior tunnel.
II. classical way.
3. septal cartilage, 5. premaxilla, 6. palatine plate of the maxillary bone.

septum up after the classical osteotomies and after tunneling the mucosa of the septum has been done. The nasal septum has to be split along a horizontal line so as to gain a possibility to move up. This technic is theoretically correct but to our opinion rarely applicable because the cases with the saddling of the dorsum are often the result of a septal mutilation by surgical mishandling (too broad a resection) or due to a

trauma. Such a ruined septum (the cartilaginous part is sometimes even absent) is not competent to fulfill the role which is expected in these cases. In conclusion we estimate that the rhinoplasty with septal approach is a technic indicated for the correction of a general hypertrophy of the nose with a serious deviation of the septum while the hump is slight and symmetrical. It is also indicated in noses with septal deformities and thirdly in selected cases of saddling noses.


## SUMMARY

The authors ascertain that the technics of aesthetical and functional rhinoplasty have undergone an important evolution in the last twenty years. They discuss the indications for a corrective rhinoplasty by septal approach. For this the most important are those where together with the positional correction of the nasal septum, a hump has to be removed, secondly where not only the formation of the internal nose has to be altered but also the outer walls and the pyramid after osteotomies and thirdly in certain cases of a saddle nose.

## RÉSUMÉ

Les auteurs débutent en faisant remarquer que les techniques de rhinoplastie esthétique subissent une importante évolution depuis ces vingt dernières années. Ils critiquent la technique de rhinoplastie correctrice par voie septale qui consiste à ne pas décapiter la bosse nasale ni placer de greffon à l'arête mais à abaisser au à soulever cette arête par une section judicieuse du septum associée aux ostéotomies. Ils estiment cette technique uniquement intéressante dans les cas de nez avec bosse peu importante et régulière et cloison fortement déviée.



Lt. G. Willemotlaan 90,
Mariakerke, Gent, Belgium.

Departm. of Otorhinolaryngology,
State University, Catharijnesingel 101,
Utrecht, the Netherlands.



The paper will be presented at the 5th International Congress of Plastic and reconstructive surgery, Melbourne, febr. 1971.