

On the “let-down” procedure in septorhinoplasty†*

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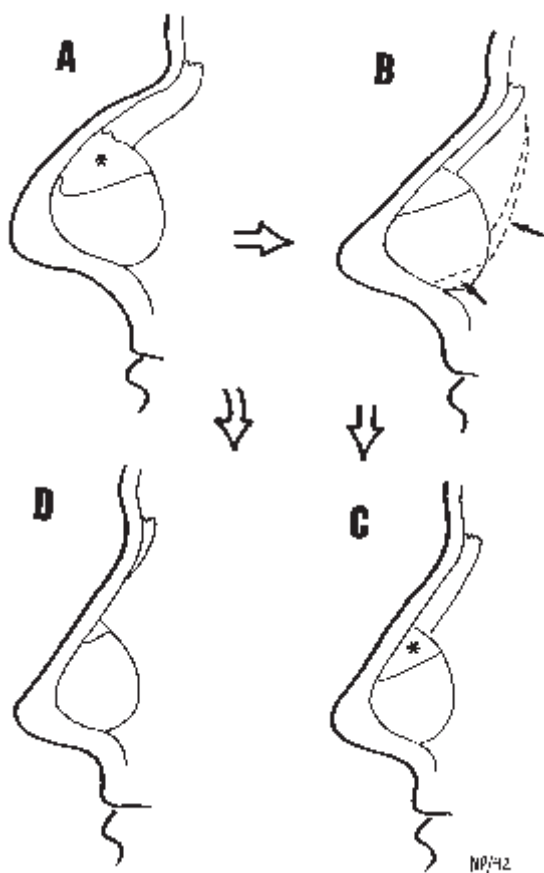
SUMMARY

In septorhinoplasty, the classical modified and Cottle’s technique may complement each other. The maxilla-premaxilla approach of Cottle can be an utmost tool. Combined “let-down” and “push-down” (LD/PD) procedures can be advantageous in case of: (1) lowering a prominent pyramid while preserving the original profile of the dorsum; (2) lowering a pyramid that, after removal with a rasp knife and scissors, remains too prominent; (3) equalizing a deviated bony vault; and (4) eliminating a cartilaginous hump while preserving the integrity of the upper lateral cartilage. Septum excisions should be done to provide space for LD/PD manoeuvres.

Key words: septorhinoplasty, let-down procedure

INTRODUCTION

In patients with a hump or prominent nose there are two basic rhinoplastic approaches: the *classical modified approach*, basically described by Roe (1887, 1891) and Joseph (1904, 1907a, 1931), and the combined “push-down” (PD) and “push-up” (PU) technique (Cottle, 1954). In the first approach the hump is resected using a saw chisel and/or rasp, whereas in the second approach the hump or prominent pyramid is pushed down after appropriate resections of the cartilaginous and bony septum. Wedge resection or “let-down” (LD) technique is a wise modification of Cottle’s technique introduced by Huizing (1975). A



(E)

Figure 1. A schematic view of the final dimensions of the upper lateral cartilages (asterisks) comparing the combined method (B, C) and the classical method (D). When lowering a very prominent nose (A, E) the use of a combination of the classical modified method (B) plus a let-down (C) can spare the upper lateral cartilages from excessive resection.

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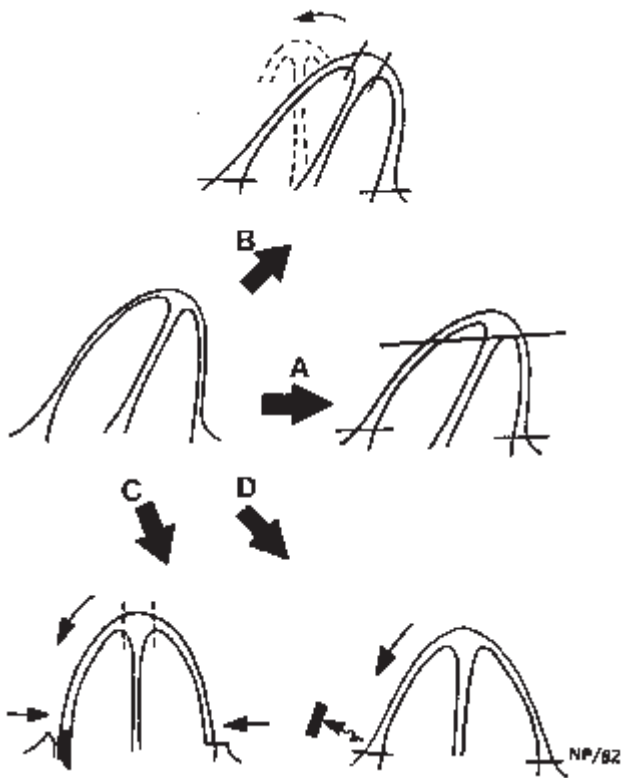


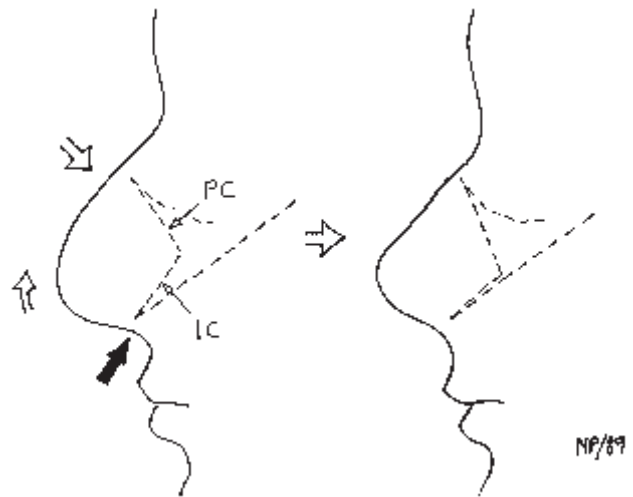
Figure 2. Deviation of the nasal pyramid. Asymmetrical resection is the key for achieving adequate correction (A). A push-down is an alternative manoeuvre for correcting deviated noses (B), but a let-down is more logical (C). The portion of bony vault pushed down (B) - represented here in black - is resected when a let-down procedure (C) is performed (in part taken from Neves Pinto [1985]).

bilateral wedge is taken from the base of the bony vault to allow a let-down (and not a push-down) of the bony and cartilaginous dorsum.

METHOD

Routinely, I prefer the use of a conservative modification of the classical modified technique and not Cottle's method. It does not matter how big a hump is. After rasping or chiselling of the bony portion of the hump, the cartilaginous hump is sculptured down step-by-step using a knife and a pair of scissors, thereby preserving the endonasal mucosa and the valve area. However, when a patient has a good dorsal profile all he needs is to have it lowered - both for aesthetic and functional purposes - to open the valve. In these cases I prefer the use of the let-down procedure, preserving the integrity of the nasal dorsum. Also in patients with a prominent nose (Figures 1A and 1E), in which the upper lateral cartilages would require too much resection with the classical modified technique, I like to take advantage by free use of the classical and Cottle's method. First, I sculpture the dorsum with a rasp and knife. Then, let-down of the bony and cartilaginous valve is carried out to diminish the abnormal prominence of the pyramid as a whole, thereby preserving the upper lateral cartilages (Figures 1C and 1D). A more extensive description of this combined method can be found in the paper by Pirsig and Königs (1988).

To equalize an asymmetric bony valve, instead of using the clas-



(A)

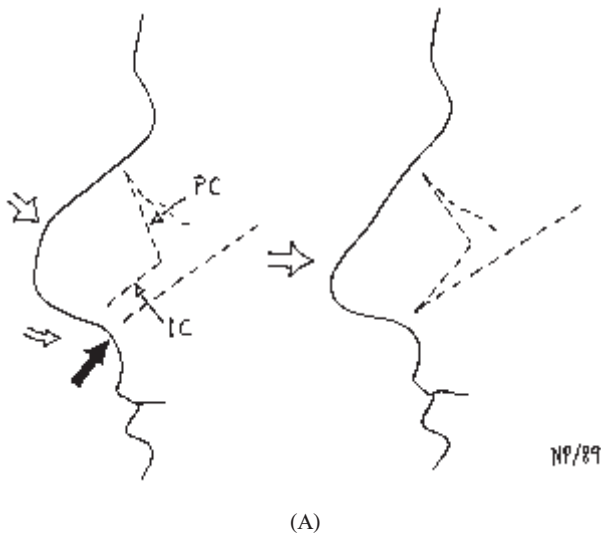


(B)

Figure 3. (A) Let-down limited to the cartilaginous vault, with preservation of the original length of the most caudal portion of the cartilaginous septum (black arrow) and elimination of a small cartilaginous hump without any additional dorsum work (PC: posterior chondrotomy; IC: inferior chondrotomy; G: gap created by the strategical resection of the septum, as necessary for providing room for the let-down manoeuvre as well as for the elimination of the septum deformity. (B) Final result of the approach as described in Figure 3A (in part from Neves Pinto [1989]).

sical asymmetrical resection of the dorsum, I also prefer the use of the let-down method (Figure 2). It appears that Joseph (1907b) was the first to use the wedge resection for this indication. In patients with a cartilaginous hump and/or prominence, the let-down technique is the method of choice. It allows a reduction of the cartilaginous prominence without damaging its architecture. A cartilaginous and bony valve can only be effectively lowered after strips of septal cartilage and bone have been removed. Quite commonly the resections made are the ones that are needed to correct a septal deformity.

Two basic pathologies deserve distinction (Figures 3-4). In the first one the most caudal portions of the chordal part of the cartilaginous septum are preserved (Figures 3A and 3B). In the second situation a segment of the chordal part of the cartilaginous septum is resected (Figures 4A and 4B). The resulting gap



(A)



(B)

Figure 4. (A) Let-down limited to the cartilaginous vault, closing a gap created at the most caudal portion of the cartilaginous septum (black arrow; PC: posterior chondrotomy; IC: inferior chondrotomy; G: gap created by the strategical resection of the septum, as necessary for the let-down manoeuver and elimination of the septum deformity. (B) An example of reduction of a big hump achieved by the approach described in Figure 4A. There was no aesthetical indication in this particular case, so the dorsum and nasal lobule were not changed (taken from Neves Pinto [1980, 1989]).

is closed by the let-down procedure. A let-down procedure limited to the cartilaginous valve may produce an amazing reduction of nasal projection.

CONCLUSION

In septorhinoplasty, the classical modified and Cottle's technique may complement each other. The maxilla-premaxilla approach of Cottle et al. (1958) may be used as an utmost tool. The let-down procedure can be advantageous in reducing a cartilaginous hump and lowering a prominent nasal pyramid as well in equalizing an asymmetric bony vault.

REFERENCES

1. Cottle MH (1954) Nasal roof repair and hump removal. Arch Otolaryng 60: 408-414.
2. Cottle MH, Loring R M, Fisher GG, Gaynon IE (1958) The maxilla-premaxilla approach to extensive nasal surgery. Arch Otolaryngol 68: 301-313.
3. Huizing EH (1975) Push-down of the external nasal pyramid by resection of wedges. Rhinology 13: 185-190.
4. Joseph J (1904) Intranasale Nasenhöckerabtragung. Berlin Klin Wschr 54: 18-19.
5. Joseph J (1907a) Beitrage zur rhinoplastik. Berlin Kl Wschr 16: 470-472.
6. Joseph J (1907b) Die Korrektur der Schiefnase. Dt Med Wschr 33: 2035-2040.
7. Joseph J (1931) Nasenplastik und sonstige Gesichtsplastik. Curt Kabitzsch, Leipzig.
8. Neves Pinto RM (1980) Rinosseptoplastia: Técnica pessoal. Rev Bras Cir (BR) 70: 5-15.
9. Neves Pinto RM (1985) Surgical approaches for twisted noses. F Med (BR) 91: 405-408.
10. Neves Pinto RM (1989) Septoplasties: A tentative for classification. F Med (BR) 98: 107-113.
11. Pirsig W, Königs D (1988) Wedge resection in rhinosurgery: A review of the literature and long-term results in a hundred cases. Rhinology 26: 77-88.
12. Roe JO (1887) The deformity termed "pug nose" and its correction by a simple operation. Med Rec (NY) 31: 621.
13. Roe JO (1891) The correction of angular deformities of the nose by a subcutaneous operation. Med Rec (NY) 40: 57.

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