

53. My Own Secondary Correction of the Unilateral Cleft Lip Nose

IT is contended that if the nose is corrected as described in the primary lip surgery, secondary nasal surgery, although probably still necessary, will be minimal. As already expressed, concentration on one major secondary problem at a time is preferred, particularly in the nose, which may require a very complicated combination of procedures. There are two exceptions to this general rule:

1. If the lip requires only minor revision, this can be carried out at the time of the rhinoplasty.
2. If by doing the lip the nasal correction is facilitated, or vice versa, then it is well to combine the procedures for the benefit of both.

Yet, a common secondary unilateral cleft lip reveals a slightly tight upper lip with no cupid's bow or philtrum and a typical unilateral nasal distortion. Although a rhinoplasty often has been combined with an Abbe flap, it is now preferable to get the nose correct first at 16 or 17 years and then a month or so later to complete the lip with an Abbe flap. If the case is seen before 16 years, then the Abbe flap can be done first.

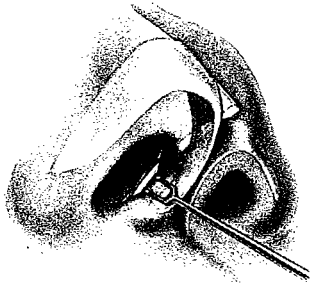
*This maintains
a better
airway at
all times*

SPECIFIC CORRECTIVE NASAL PROCEDURES

My present formula bank for correcting the unilateral cleft lip nose is a conglomerate of many methods, some personal, others part of a potpourri with a long and distinguished title—AufrichtBarronBlairBrownFarriorGilliesHoldsworthHorton-

Joseph Kilner McDowell McIndoe Metzenbaum Musgrave Pegram Pitanguy Potter Randall Reidy Reynolds Straith Tessier. Of course, the trick is picking the right combination for the specific case.

Here are the corrective procedures which I have found beneficial in various combinations. (In the following descriptions each procedure is identified by a two- or three-part number code—in order, procedure, number, initials of section title and in some cases subsection number. Case summaries later in this chapter use the codes to refer back to these procedure descriptions.)

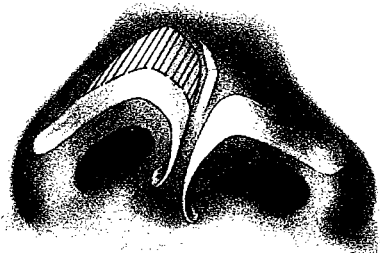


INTRANASAL INCISIONS (1-II)

The membranous septal incision is placed posteriorly flush with the septal cartilage to leave a columella deep enough to receive septal cartilage struts if indicated and to give direct exposure to the front of the deviated septum.



On the non-cleft side, an anterior vestibular (cartilage-splitting) incision is made three-quarters of a centimeter from the alar rim, but on the cleft side the incision is made a little higher, in relation to the cartilage, or more posteriorly but not as far up as the intercartilaginous line.



ALAR CARTILAGES

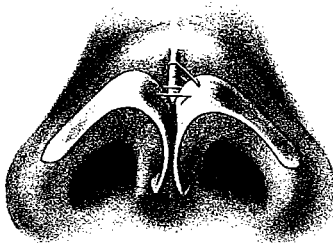
Normal (2-AC)

On the normal side, the alar cartilage is reduced markedly, leaving only a 3 mm. rim of distal cartilage intact. The resected cartilage is saved for possible onlay grafting.



Cleft side (3-AC)

On the cleft side, the alar cartilage is freed widely from the dorsal skin but for only a few millimeters from its mucosal lining. It is then lifted with 4-0 Mersilene sutures, one to the septal bridge and one to the opposite alar or upper lateral cartilage.

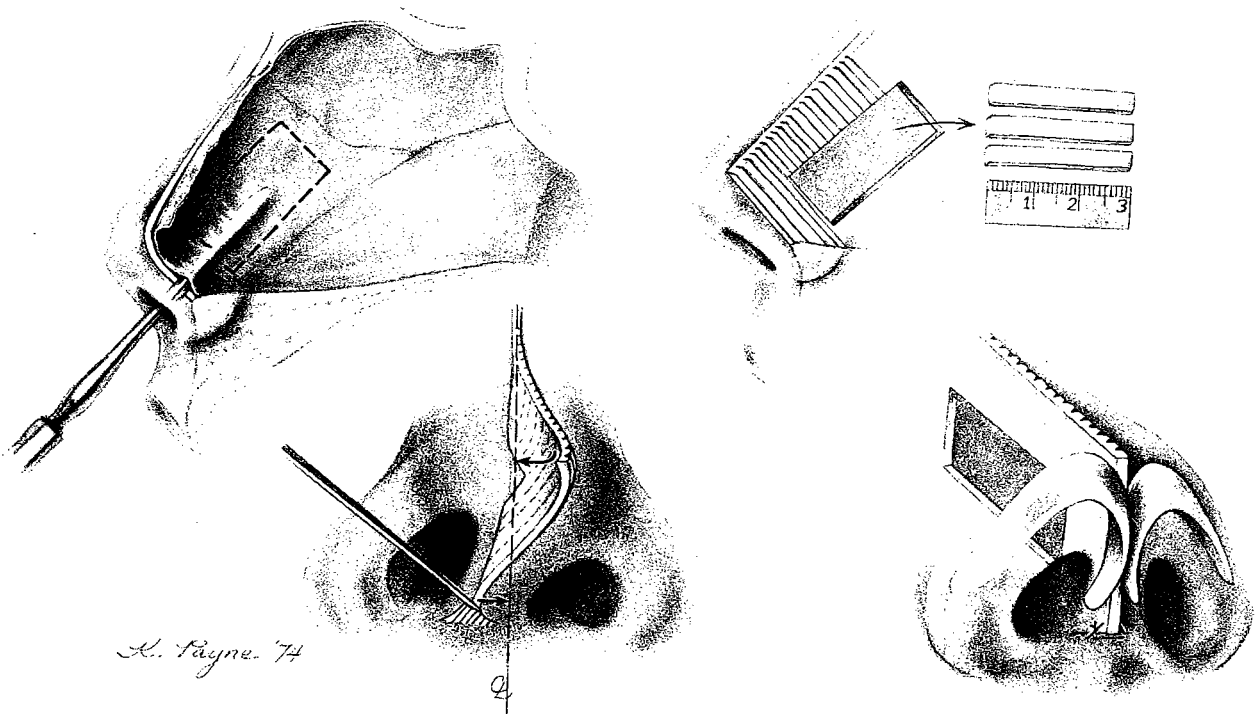
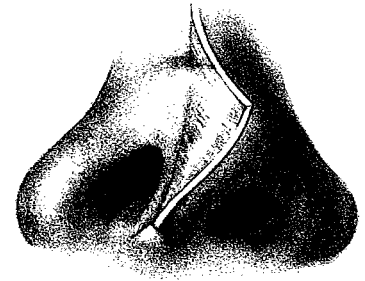


REDUCTION RHINOPLASTY (4-RR)

At this point, but before the alar lift sutures are placed, any standard corrective rhinoplastic procedures indicated can be accomplished, such as freeing the dorsal skin, removal of the hump, shortening of the septum and bilateral osteotomy.

SEPTUM (5-S)

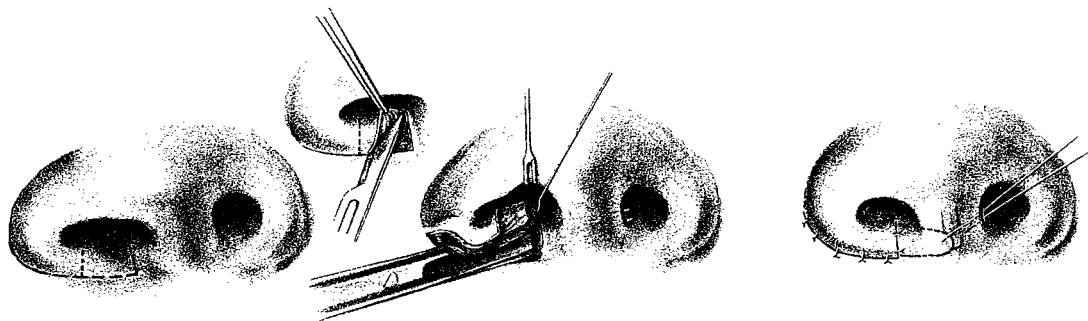
A submucous resection of a 3 × 1 cm. piece of obstructing septal cartilage is removed and placed in a sponge moistened with saline. This cartilage can be sliced into struts later, if needed. It is important that a safe L-shaped septal cartilage skeletal support be retained. The anterior, slanted limb of the septal cartilage L is freed with a chisel from its abnormal position, its concave side is scored and its base is shifted to the midline, set and fixed with 4-0 catgut or 4-0 Mersilene suture.



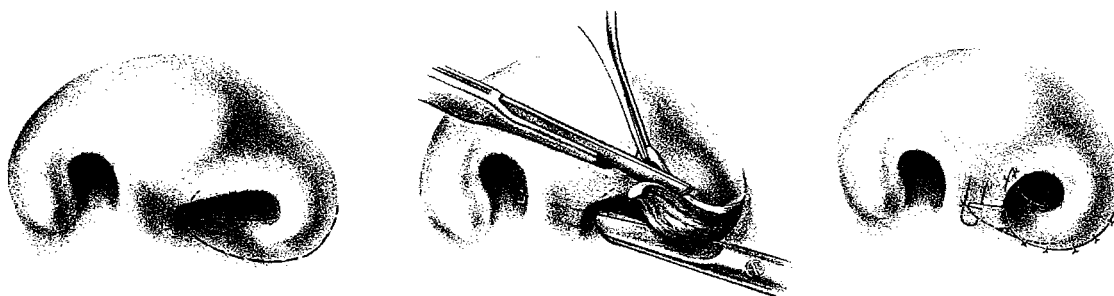
ALAR BASE

Simple alar base resection is adequate if flare is minimal and nasal floor is normal (6-AB-1).

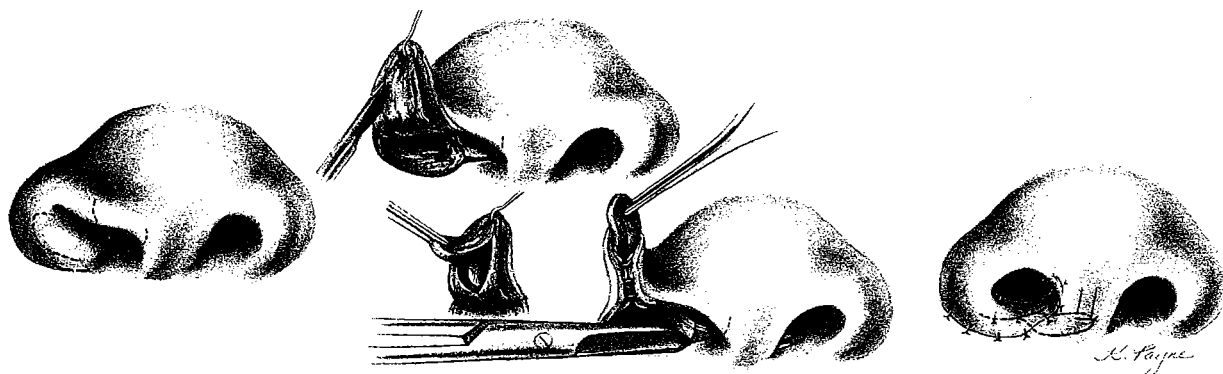
If the nasal floor is wide and the alar base is flared, they are taken as a flap and the end is denuded of epithelium so that it can be advanced medially and sutured to the periosteum at the nasal spine or to the septum if it requires this extra pull to keep it in line (6-AB-2). This action narrows the nostril and reduces the alar flare.



If the alar flare is wide but the nostril floor is nearer normal width, a subcutaneous flap is dissected from the undersurface of the alar base flap and this piece is advanced medially to the septum with resulting reduction of the alar flare (6-AB-3). The alar base skin flap then forms the nostril sill and columella base at its leisure and without tension.



If the alar base is thick, it is cut as a flap and turned up and a subcutaneous flap is carved out of its "heart," maintaining an attachment to the tip of the alar base (6-AB-4). Closure of the alar base donor area, of course, reduces its thickness. The subcutaneous flap extension is then used as the alar base tether to



the nasal spine, septum or whatever is available in the midline to maintain symmetry and prevent lateral alar drift.

IMPLANTS UNDER ALAR BASE (7-IAB)

Deficiency in anterior projection of the cleft side maxilla often requires some type of implant to increase the contour. Cancellous iliac bone graft onlay beneath the maxillary periosteum under the retroposed alar base is best, but specifically shaped Silastic sponge implants inserted on top of the periosteum can be reasonably effective and can be used at an early age.

NORMAL ALAR BASE

A wedge resection from the normal alar base is indicated in certain cases (8-NAB-1).

Free graft of alar wedge from the normal side can be used to release or lengthen the cleft side (8-NAB-2).

ALAR RIM

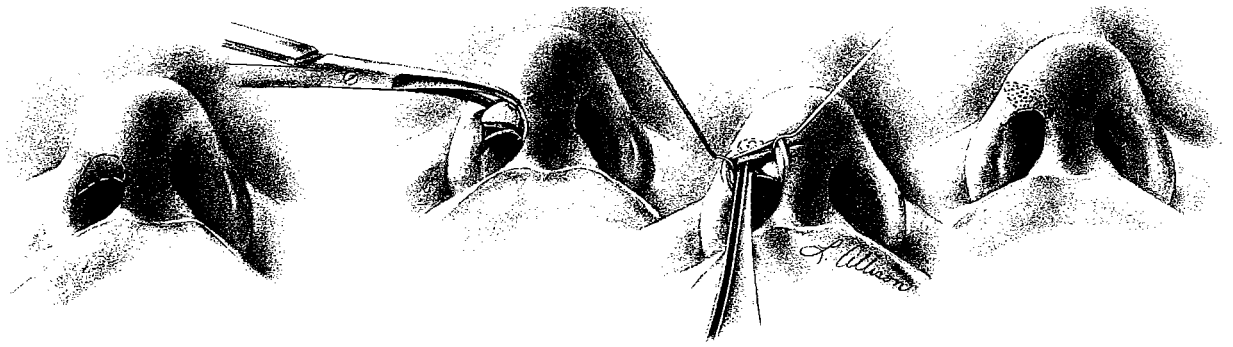
If after the rhinoplasty there is still a skin web skirting across the cleft side alar arch, it can be excised (9-AR-1).



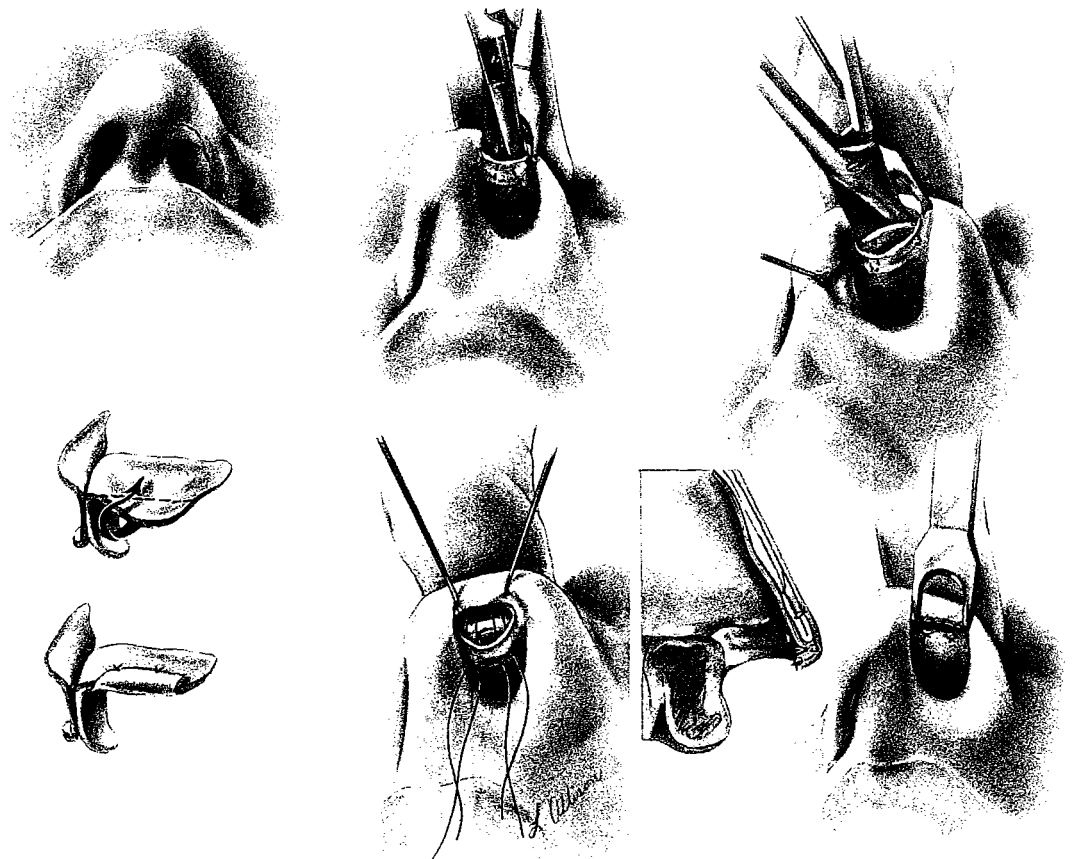
Alar rim web cut as a flap is to be transposed along a releasing incision in the medial vestibule at the join of the septum and the sidewall to lengthen the columella slightly (9-AR-2).



It can be abraded, cut as a flap with its base medial or lateral and then transposed as extra contour in the tip or at the alar kink to round out the alar arch (9-AR-3).



It is better to save the skin of the web and use it for vestibular lining (9-AR-4). An incision is made along the desired position of the alar rim in symmetry with the normal side. The skin inferior to this incision is dissected thinly but in continuity with the vestibular lining, exposing the inferior edge of the alar cartilage. This portion of the cartilage can be trimmed off, or, better, turned over on itself to strengthen the weak area. The important thing is to get it out of the way so that the thin inferior skin-vestibular flap can be tucked up in the vestibule under the alar arch with 5-0 chromic catgut sutures. This takes excess dorsal skin back under for needed vestibular lining. The skin edges along the alar rim are sutured with 6-0 silk.



MARGINAL EXCISIONS (9-AR-5)

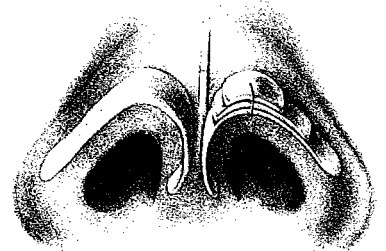
The entire alar margin may require strip excision to thin thick sidewalls or shorten long ones or just for marginal sculpturing.

Upper portion of alar margin excision can be saved as a flap and folded in at the height of the arch to round out a sharp ala-columella angle and narrow a thickened sidewall (9-AR-6).



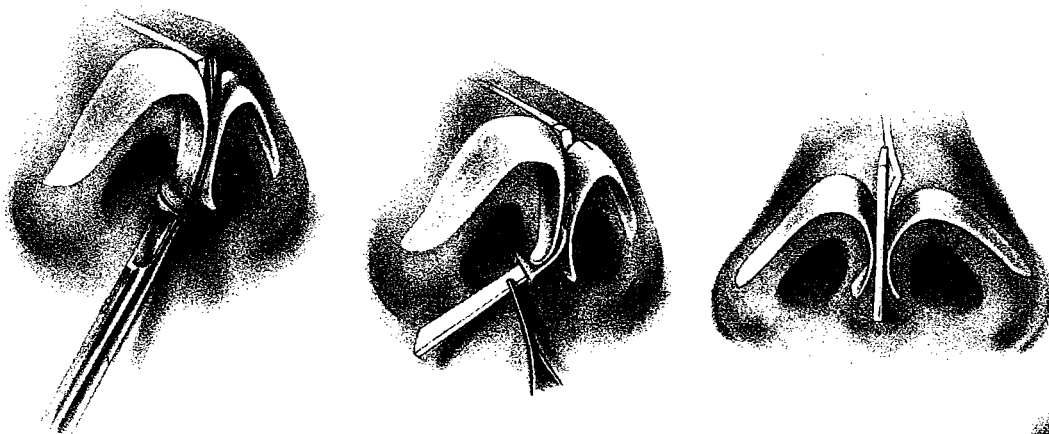
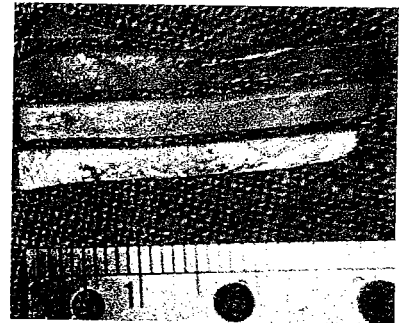
ONLAY GRAFTS (10-OG)

If, during the alar rim surgery, there is still a weakness in the rim or a lack of convex contour of the cleft-side tip cartilage, then the resected portion of the normal alar cartilage can be used as a simple onlay or tiered piggyback for even greater prominence. Slivers of septal cartilage are also effective in supporting the alar rim.

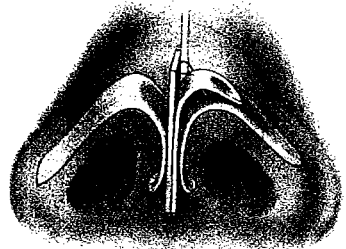


SEPTAL CARTILAGE STRUTS

Finally, if indicated, a stab at the base on the lateral side of the columella allows a pocket to be dissected with sharp Joseph scissors from the nasal spine to the nasal tip (11-SCS-1). One long, slender septal cartilage strut is threaded into this pocket to give that little extra lift of which the flattened cleft lip septum is incapable. The upper end of this cartilage can be split fleur-de-lis fashion.



If the cleft slump is still a problem, a second, longer cartilage strut can be inserted on the cleft side of the previous strut, up the columella and shunted well across the midline to arch under the cleft-side ala for extra spring support (11-SCS 2).



FINAL RESULT

Some cleft lip noses do better than others—the outcome is not always predictable. Yet, as with any nose, the final result is dependent upon the difficulty of the deformity, the quality of the nasal material available, the choice of procedures, the skill of the surgeon, the patient's healing and lady luck, not necessarily in that order!

A COMMON COMBINATION

Complete unilateral cleft lip closed in infancy. At 10 years of age the boy had nasal revision to alar base and rim and midline shield-shaped Abbe flap.

At 16 years. CL rhinoplasty.

1-II. Anterior vestibular incisions, higher on cleft side.

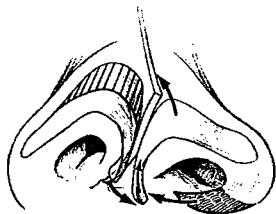
2-AC. Normal alar cartilage reduced.

3-AC. Lift cleft alar cartilage to septum (nylon).

5-S. Submucous resection centralized front of septum.

6-AB-2. Suture denuded tip of alar base to septum.

11-SCS-1. Septal cartilage strut in columella.



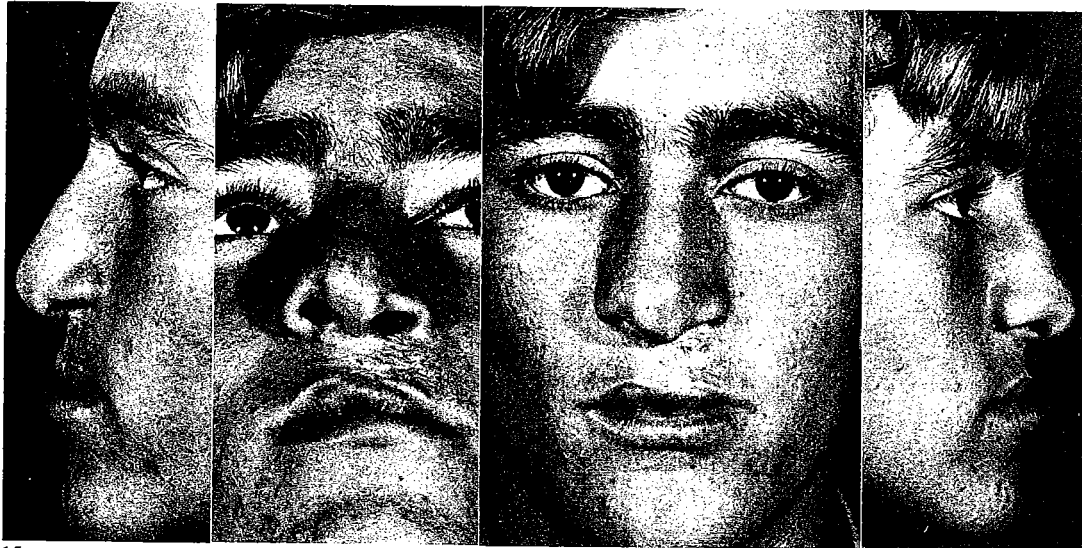
10 years



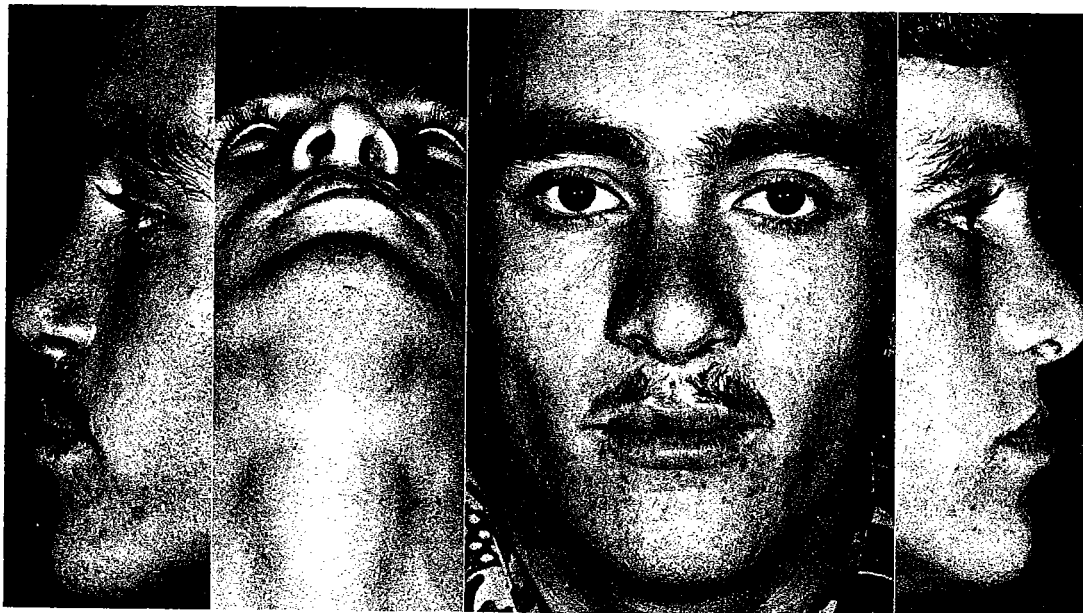
21 years

GOOD BALANCE

A Blair-Mirault type lip closure resulted in a whistling deformity, wide stitch marks and a typical cleft lip nose with all the problems, including slumping of half the tip, alar flare and transverse axis of the nostril. Revision of lip scars and a V-Y roll-down of posterior mucosa to create a vermilion tubercle added to the final improvement.



15 years



18 years

At 17 years. CL rhinoplasty.

1-II. Anterior vestibular incisions, higher on cleft side.

2-AC. Reduction of normal alar cartilage.

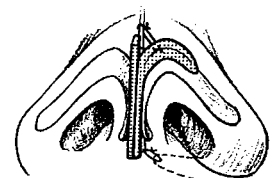
3-AC. Lift alar cartilage to septum (Mersilene).

4-RR. Hump excision and bilateral osteotomy.

5-S. Submucous resection, centralized front of septum.

6-AB-2. Suture denuded tip of alar base to septum.

11-SCS-1, 11-SCS-2. Two septal struts in columella, one in tip, one extended under cleft arch.



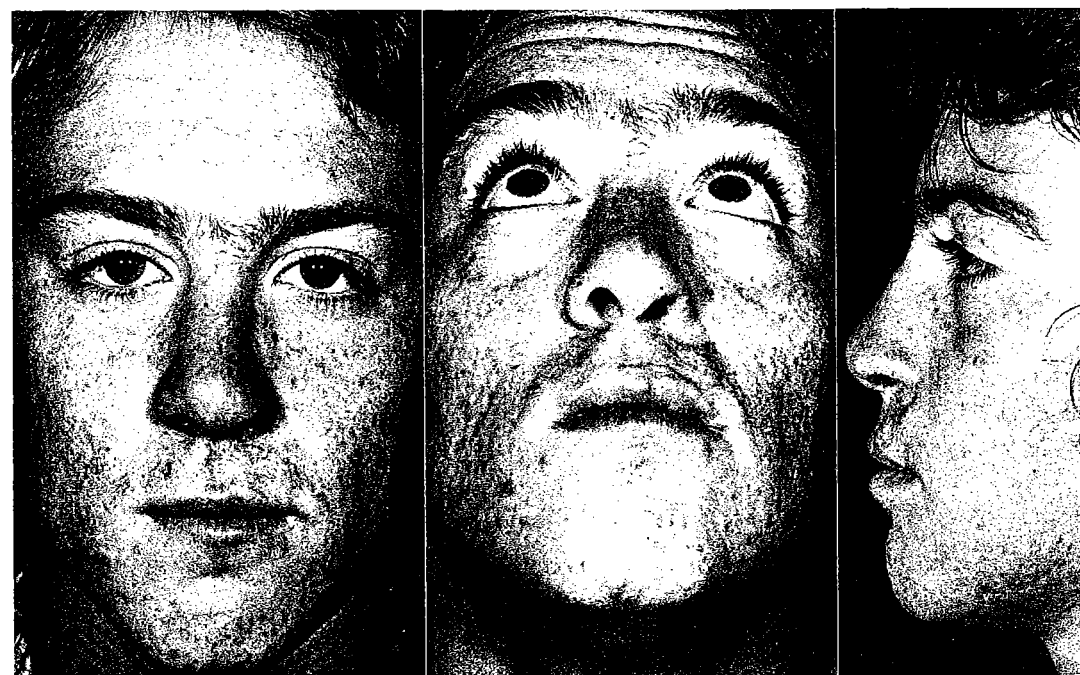
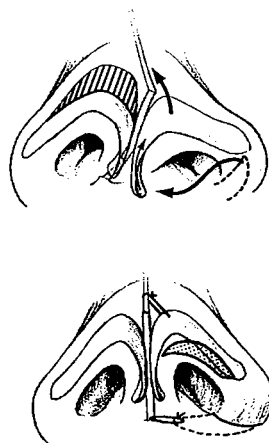
NOT SO EASY

This Blair-Brown type lip closure resulted in the typical secondary lip and nose deformities.

At age 16 years.
 CL rhinoplasty.
 1-II. Anterior vestibular incisions, higher on cleft side.
 2-AC. Reduction of normal alar cartilage.
 3-AC. Lift cleft alar cartilage to septum (nylon).
 4-RR. Shorten septum.
 5-S. Submucous resection.
 6-AB-4. Subcutaneous thinning alar base flap sutured to septum.
 10-OG. Septal cartilage to alar rim; nostril sill flap transposed to release vestibular lining tightness.

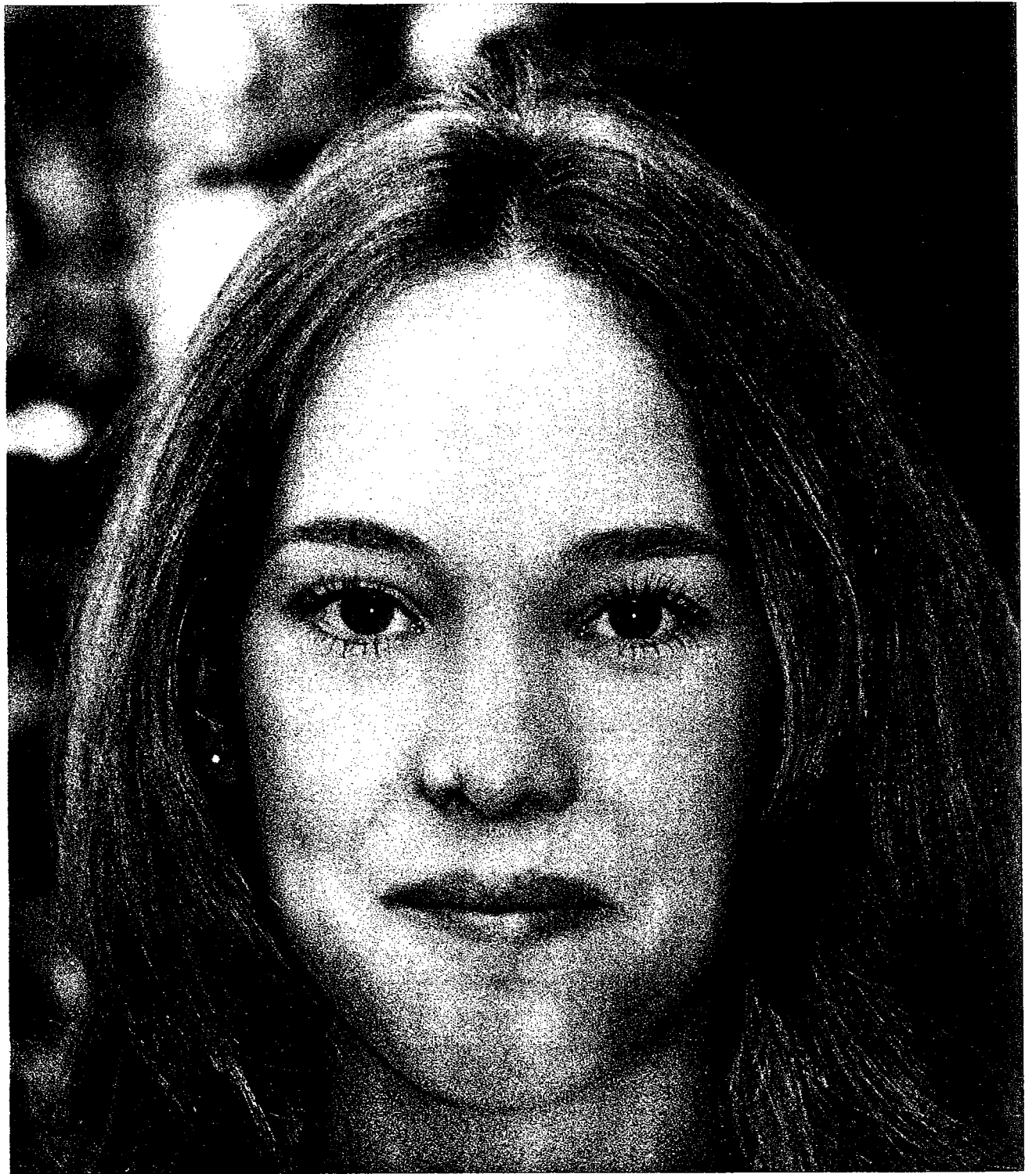


12 years



17 years

At age 17 years
 Abbe flap.



NEAR-PERFECT SYMMETRY

This 20-year-old college girl experienced the typical inferior triangular flap lip scar, with loss of landmarks, the usual asymmetrical nasal distortion and a radon seed in the nasal tip for a hemangioma.



20 years

At 20 years. Radon seed removed. CL rhinoplasty.

1-II. Anterior vestibular incisions, higher on cleft side.

2-AC. Reduction of normal alar cartilage.

3-AC. Lift cleft alar cartilage to septum (nylon).

5-S. Submucous resection, centralized front of septum; scoring of concave side.

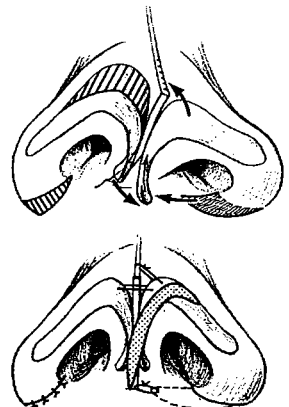
6-AB-2. Suture denuded tip of alar base to septum.

8-NAB. Wedge resection of normal alar base.

11-SCS-1. Septal cartilage strut in columella to support cleft side tip.



21 years



Midline Abbe flap done later.

GOOD SYMMETRY

This 17-year-old boy was extremely self-conscious about his secondary cleft lip and nose deformities. This combination of rhinoplastic procedures was successful, and a midline Abbe flap constructed a philtrum.

At 17 years. CL rhinoplasty.

1-II. Anterior vestibular incisions, higher on cleft side.

2-AC. Reduction of normal alar cartilage.

3-AC. Lift cleft alar cartilage to septum (nylon).

4-RR. Septum shortened.

5-S. Submucous resection.

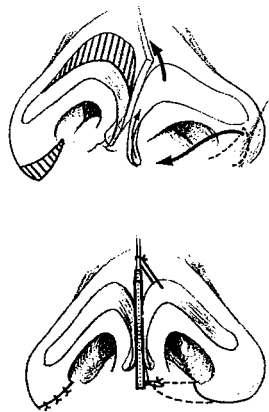
6-AB-4. Subcutaneous thinning; alar base flap suture to septum.

8-NAP. Wedge resection of normal alar base.

11-SCS-1. Septal cartilage strut in columella to tip.



17 years



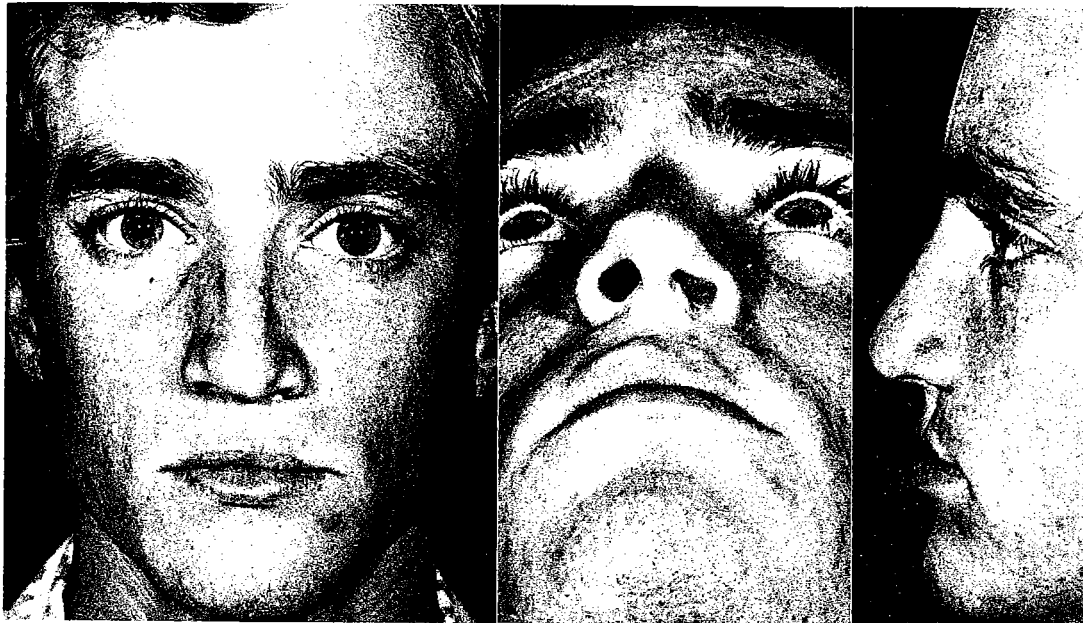
20 years

Four months later midline Abbe flap.

Nine months later reverse Z to lip.

ANOTHER COMBINATION

An 18-year-old boy with a straight-line lip closure in infancy, which had resulted in a slightly tight upper lip lacking in landmarks and the typical cleft lip nose.



18 years

At 18 years. CL rhinoplasty.

1-II. Anterior vestibular incisions, higher on cleft side.

2-AC. Reduction of normal alar cartilage.

3-AC. Lift cleft alar cartilage to septum (nylon).

4-RR. Hump excised; septum shortened.

5-S. Submucous resection, centralized front of septum.

6-AB-2. Suture denuded tip alar base to septum.

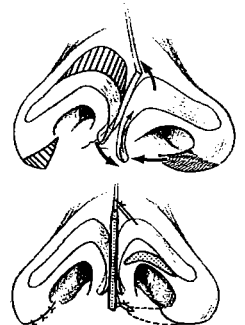
8-NAB. Wedge resection of normal alar base.

10-OG. Septal sliver along alar rim.

11-SCS-1. Septal cartilage strut in columella to tip.



19 years



One month later. Midline shield-shaped 1.2 cm. Abbe flap.

Division of pedicle after 11 days.

ALAR BASE IMPLANT

A 19-year-old Ecuadorian girl who had scar excision and secondary rotation-advancement of the lip, cleft lip rhinoplasty with Silastic sponge implants through upper labial sulcus under alar base and through lower labial sulcus to the chin.

At 19 years. CL rhinoplasty.

1-II. Anterior vestibular incisions, higher on cleft side.

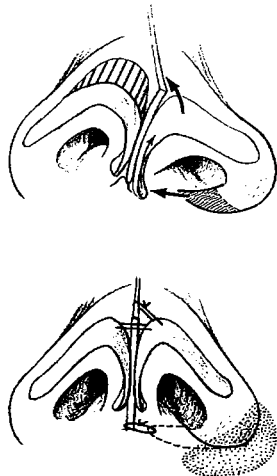
2-AC. Redirection of normal alar cartilage.

3-AC. Lift cleft alar cartilage to septum (nylon).

4-RR. Hump excision; septum shortening; bilateral osteotomy.

6-AB-2. Suture denuded tip of alar base to septum.

7-IAB. Silastic sponge under alar base.



GOOD NASAL BALANCE

This patient had primary lip surgery in Canada and a later revision in the United States, ending up with some type of interdigitation.



At age 25, the patient had lip scar revision and cleft lip rhinoplasty.



At 25 years. CL rhinoplasty.

1-II. Anterior vestibular incisions, higher on cleft side.

2-AC. Reduction of normal alar cartilage.

3-AC. Lift cleft alar cartilage to septum (nylon).

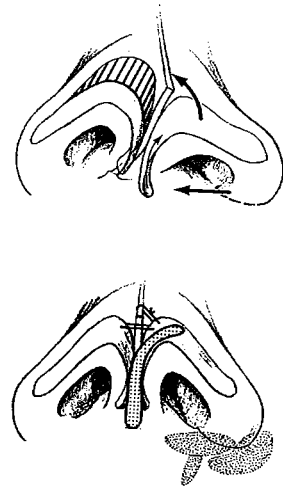
5-S. Submucous resection.

6-AB-1. Wedge resection of cleft alar base.

7-IAB. Septal cartilage under alar base.

10-OG. Septal cartilage to nasal floor and under lip scar.

11-SCS-2. Septal cartilage strut in columella to cleft-side tip.

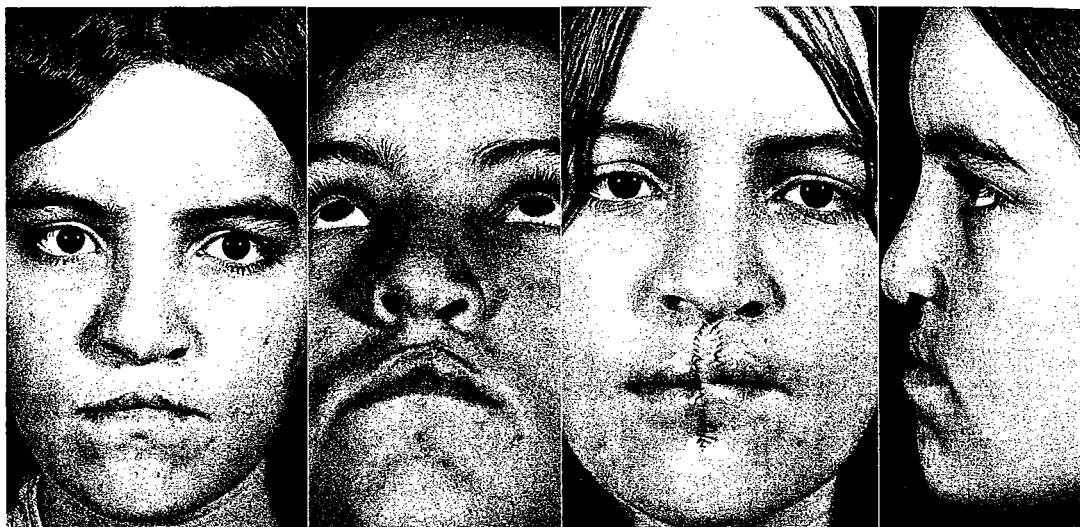


A COMMON COMBINATION

A Brown-McDowell type lip closure resulting in a tight lip and lack of cupid's bow and dimple.

At 15 years. Abbe flap.

Division of pedicle after 10 days.



At age 15, the patient had an Abbe flap with division of the pedicle after 10 days, which released the lip and created a philtrum.

At age 16, a cleft lip rhinoplasty was carried out.

At 16 years. CL rhinoplasty.

I-II. Anterior vestibular incisions, higher on cleft side.

2-AC. Reduction of normal alar cartilage.

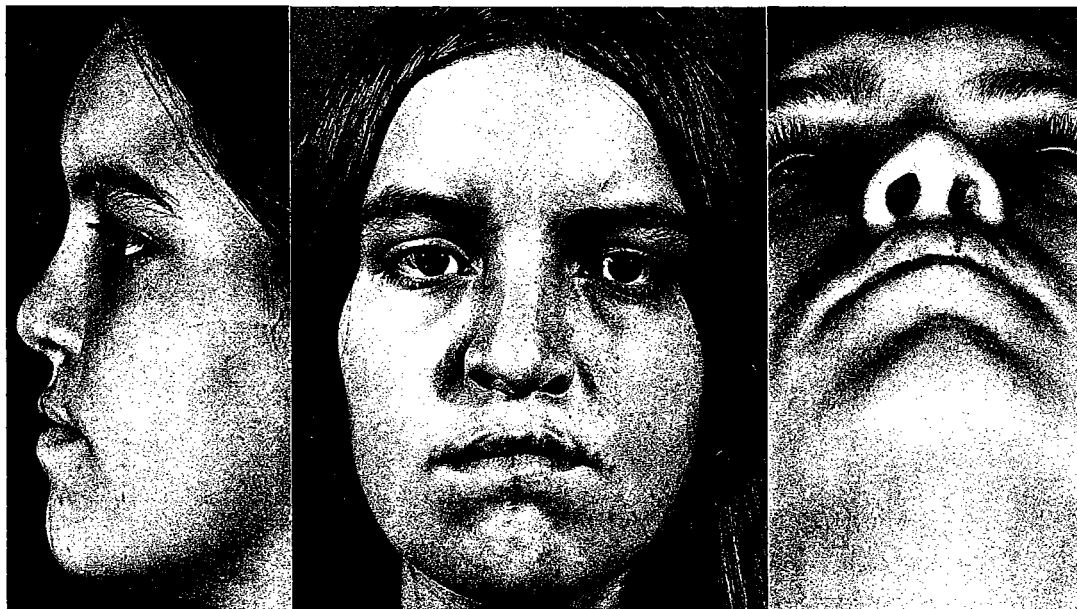
3-AC. Lift cleft alar cartilage to septum (catgut).

4-RR. Septal shortening.

5-S. Submucous resections.

6-AB-2. Alar base advancement.

7-IAB. Septal cartilage under alar base.



ONLY AN IMPROVEMENT

This 17-year-old girl had secondary nasal and labial deformities following an inferior triangular flap closure.



17 years



19 years

9-AR-1. Alar base excised.

10-OG. Septal cartilage to alar rim.

11-SCS-1. Septal cartilage strut in columella to tip.

At 18 years. Midline shield-shaped 1.5×1 cm. Abbe flap.

Division of pedicle after 13 days and at the same time as CL rhinoplasty.

1-II. Anterior vestibular incisions, higher on cleft side.

2-AC. Reduction of normal alar cartilage.

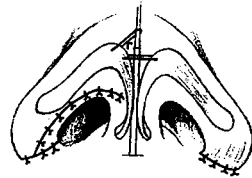
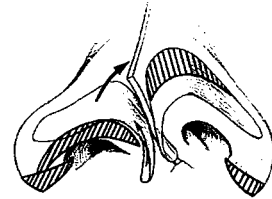
3-AC. Lift cleft alar cartilage to septum (nylon).

5-S. Submucous resection.

6-AB-1. Wedge resection of cleft alar base.

8-NAB. Wedge resection of normal alar base.

9-AR-5. Alar margin excisions.



There was improvement, but the cleft lip septum, with its deviation, does not offer true tip support. Had a septal cartilage strut been inserted through the columella into the tip as usual, there would have been finer nasal tip projection. Lip scar revision is pending.

AN IMPROVEMENT FROM BELOW

This 16-year-old girl had a severely tight upper lip with typical unilateral cleft lip nose distortion. Cleft lip rhinoplasty was performed but she never returned for her Abbe flap.

At 16 years. CL rhinoplasty.

1-II. Anterior vestibular incisions, higher on cleft side.

2-AC. Reduction of normal alar cartilage.

3-AC. Lift cleft alar cartilage to septum (nylon).

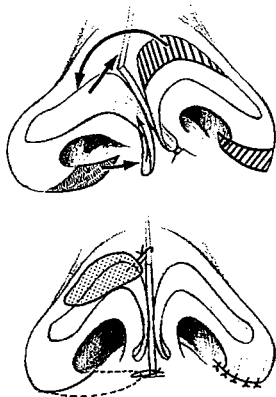
4-RR. Bilateral osteotomy.

6-AB-2. Suture denuded tip of alar base to septum.

8-NAB. Wedge resection of normal alar base.

10-OG. Alar cartilage onlay to cleft side.

11-SCS-1. Septal cartilage strut in columella to tip.



COMBINED NASAL REDUCTION AND CORRECTION

Original straight-line lip closure carried out in Cuba was revised in Miami at age 17 years with rotation-advancement approach by resident, Richard Beck. The nose, however, not only suffered the usual cleft lip nasal distortion, it was severely humped and also hooked, witch-like, over a receding chin.



17 years

At the same time as the cleft lip rhinoplasty, a 7 cm. Silastic sponge implant was specifically cut to shape and inserted over the periosteum of the mentum through a 1 cm. incision in the lower labial sulcus.



19 years

At 19 years. CL rhinoplasty.

1-II. Anterior vestibular incisions, higher on cleft side.

2-AC. Reduction of normal alar cartilage.

3-AC. Lift cleft alar cartilage to septum (catgut).

4-RR. Hump excised; septum shortened; bilateral osteotomy.

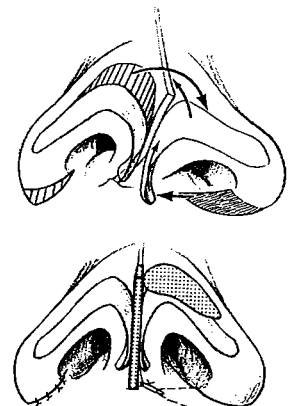
5-S. Submucous resection.

6-AB-2. Suture denuded tip of alar base to septum.

8-NAB. Wedge resection of normal alar base.

10-OG. Alar cartilage onlay to cleft side.

11-SCS-1. Septal cartilage strut in columella to tip.



A MODERATE REDUCTION

This 15-year-old girl had lip scar revision with rotation-advancement in the upper portion and free border trimming of the vermillion. Then, at 18 years, she had a cleft lip rhinoplasty with *more emphasis on the reduction*.

At 18 years. CL rhinoplasty.

1-II. Anterior vestibular incisions, higher on cleft side.

2-AC. Reduction of normal alar cartilage.

3-AC. Lift cleft alar cartilage to septum (Mersilene).

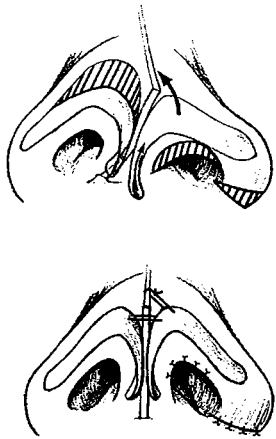
4-RR. Hump excision; septum shortening; bilateral osteotomy.

6-AB-1. Wedge resection of cleft alar base.

9-AR-1. Alar rim web excised.



15 years



18 years

A DIFFICULT ONE

LeMesurier cleft lip closure without nasal correction by the age of 14 years revealed no great improvement in the nose, which presented an asymmetrical and difficult problem. By 15 years, attempt at correction seemed justified.

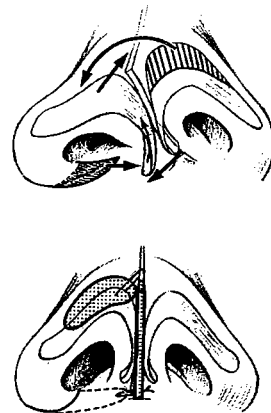


15 years

At 15 years. CL rhinoplasty.
1-II. Anterior vestibular incisions, higher on cleft side.
2-AC. Reduction of normal alar cartilage.
3-AC. Lift cleft alar cartilage to septum (Mersilene).
4-RR. Hump excision; septum shortening; bilateral osteotomy.
5-S. Submucous resection, centralized front of septum.
6-AB-2. Suture denuded tip of alar base to septum.
10-OG. Alar cartilage onlay graft.
11-SCS-1. Septal cartilage strut in columella to tip.



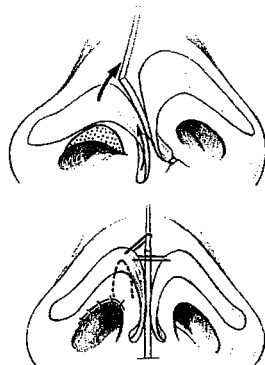
16 years



VARIATION IN APPROACH AT ELEVEN YEARS

This 10-year-old boy had had a Tennison-type lip closure and later an Oxford V-Y palate pushback done in Thailand by Eric Peet. He presented a unilateral vermilion whistling deformity and the typical unilateral nasal distortion with flaring ala, asymmetry of alar cartilages, webbed alar rim, deviated septum presenting up front with its nasal spine in the normal nostril.

At 11 years. CL
rhinoplasty.
3-AC. Lift cleft
alar cartilage to sep-
tum (nylon).
9-AR-3. Alar web
abraded and tucked
as flap over alar
cartilage.



By 11 years, this boy seemed mature enough for conservative corrective surgery without disturbance of the septum. V-Y flap of posterior mucosa filled out discrepancy in vermilion free border as alar cartilage was lifted through marginal incision and de-epithelialized rim web flap was transposed.

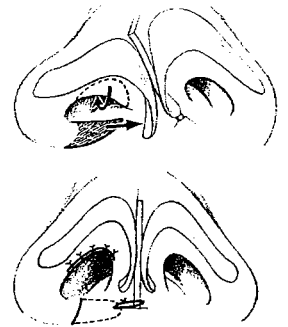
At 12 years, tip of alar base was denuded and advanced to septum and alar rim tucking procedure was used.



6 days P.O.



At 12 years.
6-AB-2. Suture denuded tip of alar base to septum.
9-AR-4. Modified alar rim tucking procedure.

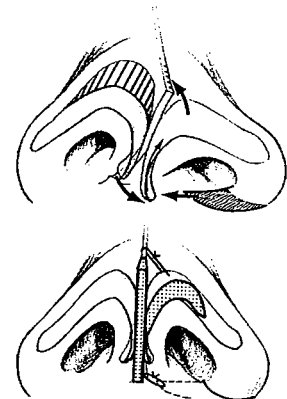


AND EVEN EARLIER

This six-year-old boy had a LeMesurier lip closure in Cuba, and since no primary nasal correction had been attempted, the severe distortion remained. A modified cleft lip rhinoplasty seemed justified to clear the airway and prepare him for school.



At 6 years. CL rhinoplasty.
1-II. Anterior vestibular incisions, higher on left side.
2-AC. Reduction of normal alar cartilage.
3-AC. Lift cleft alar cartilage to septum (nylon).
5-S. Submucous resection of obstruction; centralized front of septum; scored concave side.
6-AB-2. Suture denuded tip of alar base to septum.
11-SCS-1, 11-SCS-2. Septal cartilage strut in columella to tip and shunted under cleft arch.



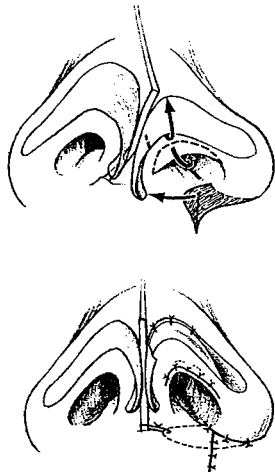
ALAR WEB TUCKING

This eight-and-a-half-year-old boy had his cleft closed by the Blair-Brown procedure. The lip was tight without landmarks, deserving a midline Abbe flap, and the flare of the alar base and web of the alar rim seemed to justify early correction.

At 8½ years. CL rhinoplasty.

6-AB-2. Upper portion of lip scar excised as flap extension of alar base, denuded and sutured to septum.

9-AR-4. Ideal alar rim position incised with dissection of skin in both directions and exposure of lower border of alar cartilage; overfolding of cartilage with sutures followed by tucking skin flap as lining to fornix of vestibule and suture of skin edge along new alar rim.



Midline, shield-shaped Abbe flap by resident S. A. Wolfe.

Division of pedicle after 9 days.

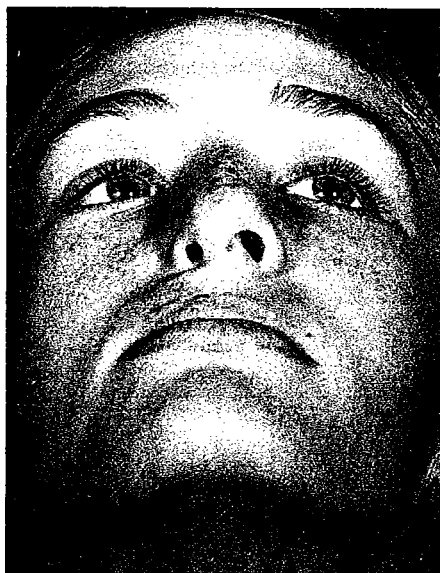


A TRULY CONSTRICTED NOSTRIL

Result of Brown-McDowell type lip closure resulted in absence of cupid's bow, philtrum and dimple, tight upper lip, relatively protuberant lower lip and cleft-side maxillary hypoplasia.



13 years



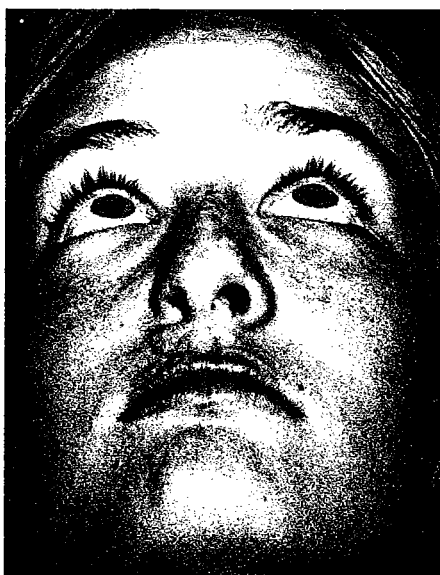
At age 13 years.

Iliac bone grafts placed over maxilla and under cleft-side alar base.

V-Y lateral advancement of alar base on the constricted cleft side.



14 years



At age 14 years.

Midline, shield-shaped, 1.5 cm. Abbe flap.

Division of pedicle after 13 days.

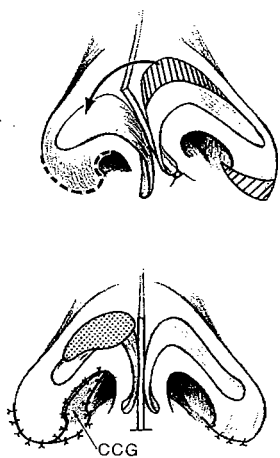
The original unilateral scar and the persistently constricted cleft-side nostril remained the major problem. A modified cleft lip rhinoplasty and scar revision was done at 15 years.

At 15 years. CL rhinoplasty.

2-AC. Reduction of normal alar cartilage.

8-NAB. Wedge resection of normal alar base.

10-OG. Alar cartilage onlay to cleft side. Auricular chondrocutaneous graft to vestibule and alar base. Unilateral lip scar revision.



15 years

Radical through-and-through release of the alar base from the lip, cheek and vestibule was filled with a composite auricular graft taken from the helix join with the lobule. The graft was unrolled with the portion of full-thickness skin being inserted into the vestibular lining defect. The other end, retained as a composite chondrocutaneous component, was added on as an extension to the end of the alar base in the nasal floor. This opened the nostril and, when the septum is straightened, will present a respectable nasal entrance. A minor reduction rhinoplasty of hump excision, septal shortening and bilateral osteotomies plus a submucous resection and use of the cartilage as a strut in the columella to support the tip has been postponed until age 16 years.



AN ODD SEQUELA

This boy, who had a complete cleft of the lip closed at nine days in West Virginia with what seems to have been a LeMesurier-type quadrilateral flap, was first seen at age 14 years. The nose is a mystery! The septum presented with the nasal spine in the normal nostril and was accompanied by the usual tilt over the cleft. Otherwise, the nasal deformity was totally atypical, with a sharp kink in the alar rim more suggestive of a cleft nostril than a cleft lip. The nostril was completely vertical, being more "up and down" even than the normal side, and the alar base not only had no flare, it went straight into the lip like a post without even the nicety of a nostril sill. Starting at age 16, three operations have been done so far in an effort to rearrange this bizzare disfigurement.



14 years

Six months later sidewall reduction by marginal excisions and Weir wedge resection was done.

At age 17 years unilateral chondromucosal flap from cleft side of membranous septal area was transposed to cleft-side vestibule for arch support.

At 16 years. CL rhinoplasty.

2-AC. Reduction of normal alar cartilage.

3-AC. No lift, but scoring cleft alar cartilage to reduce kink.

4-RR. Bilateral osteotomy.

5-S. Submucous resection, centralized front of septum.

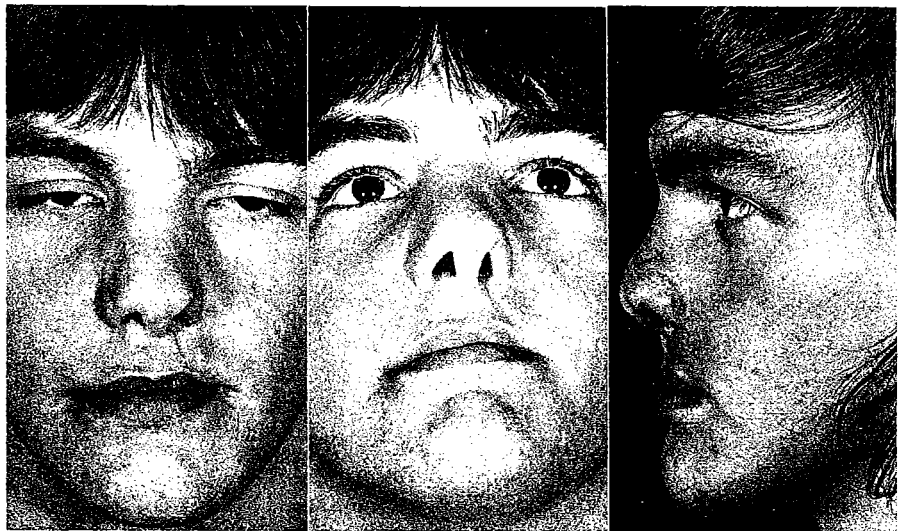
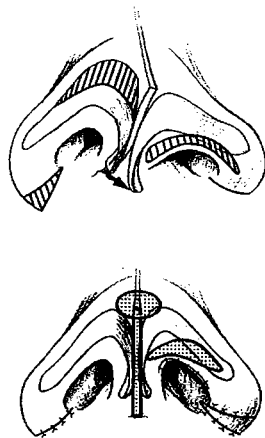
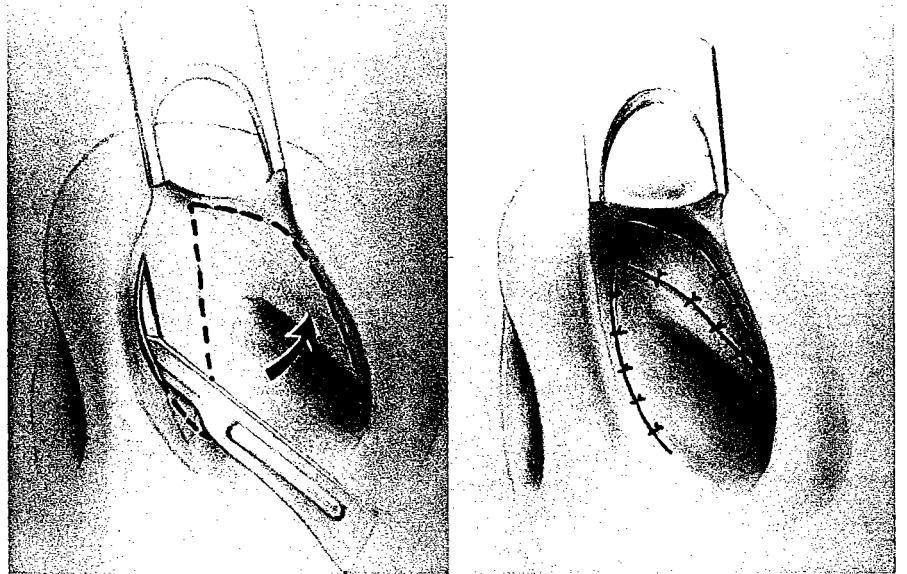
8-NAB-1. Wedge resection of normal alar base.

8-NAB-2. Alar base wedge free grafted from normal to cleft alar base.

9-AR-5. Marginal excision.

10-OG. Septal cartilage to cleft rim.

11-SCS-1. Septal cartilage strut in columella.



AFTER EARLY ROTATION-ADVANCEMENT

At last, here is one of the first of my rotation-advancement lip closures who is now old enough for final secondary nasal correction. In 1956, in Miami, this North Carolina boy had a rotation-advancement without refinements and without primary nasal correction except alar rim web excision.



His nose persisted in its cleft side slump, so at age 17 years he returned for a cleft lip rhinoplasty.



At 17 years. CL rhinoplasty.

1-II. Anterior vestibular incisions, higher on left side.

2-AC. Reduction of normal alar cartilage.

3-AC. Lift cleft alar cartilage to septum (Mersilene).

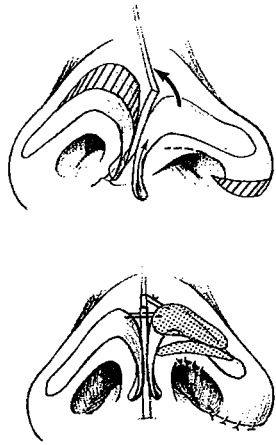
4-RR. Hump excision, septal shortening.

5-S. Submucous resection.

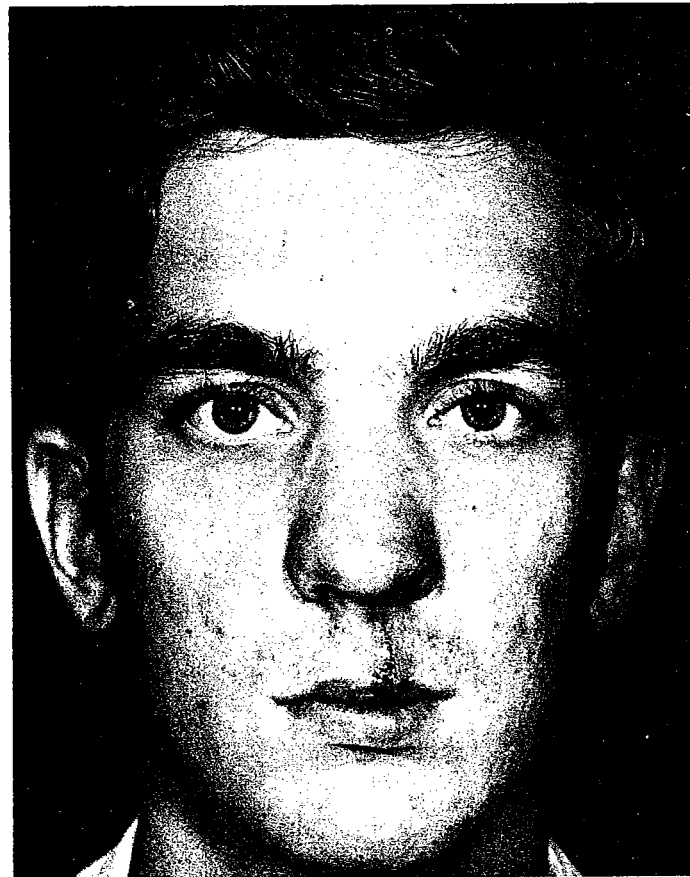
6-AB-1. Wedge resection of cleft alar base.

9-AR-6. Alar rim flap to columella.

10-OG. Alar cartilage onlay to cleft side, septal cartilage also.



After rhinoplasty.



After lip revision with "white roll" flap and alar base advancement.

CAMOUFLAGE ONLY HINGE GRAFT

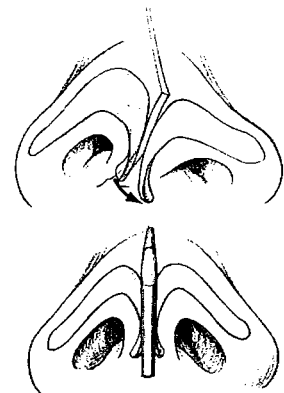
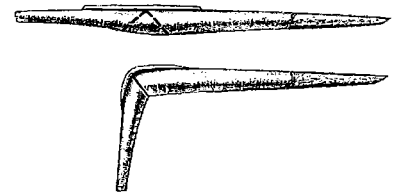
A 41-year-old married woman, who had had her lip closed in infancy and later a LeMesurier-type quadrilateral flap revision, resulted in a slightly tight upper lip without landmarks. The nose revealed an unbelievable deformity with such severe distortion that the usual maneuvers were bypassed.



The distortion was so great that a camouflage onlay graft of bridge and tip was necessary. Through a columella-splitting incision, a modified Gillies hinge graft was inserted, and even the nostrils straightened into reasonable symmetry.



At age 42 years. CL rhinoplasty.
4-RR. Bilateral osteotomy.
5-S. Submucous resection, centralized front of septum.
10-OG. Costal osteochondral hinge graft to nasal bridge and tip.



Four months later midline shield-shaped Abbe flap.
Division of pedicle after 10 days.

SHORT FORK

A 12-year-old boy with a Brown-McDowell type lip closure with absence of landmarks, asymmetry of the nose and notable unilateral shortness of the columella. A midline shield-shaped Abbe flap improved the lip, but the scars of inset were slightly ridged, and the columella shortness persisted to the extent of snubbing the nasal tip.

At 12 years. Abbe flap.
Division of pedicle after 9 days.



12 years

14 years

At 14 years. Forked flap.



15 years

A modified short forked flap revised the lip scars and at the same time lengthened the columella and elevated the nasal tip.

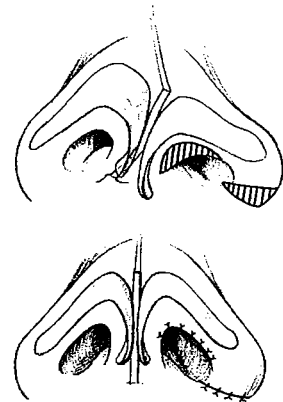
THE CHIN TOO

It is important not to stop short of the very best that can be achieved for each case. The goal is not just the normal but an *aesthetic normal*.

This 18-year-old girl had had her incomplete cleft lip closed in childhood.



At 18 years. CL rhinoplasty.
4-RR. Septal shortening.
6-AB-1. Wedge resection of cleft alar base.



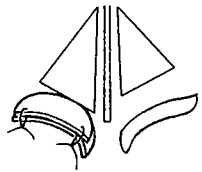
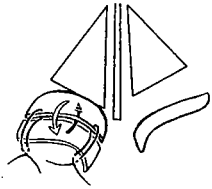
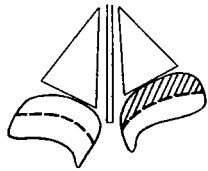
The patient, rendered as near normal as possible, then received that little extra bonus of a Silastic sponge implant, trimmed to shape and inserted through a lower labial sulcus stab incision to enhance her chin and soften the protuberant lower lip.



V-Y posterior mucosal roll-down to form tubercle.
Abrasion of lip scars.

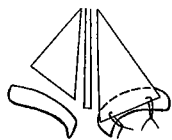
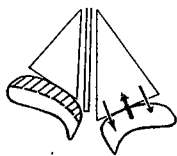
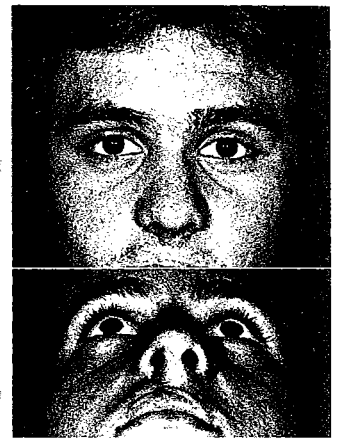
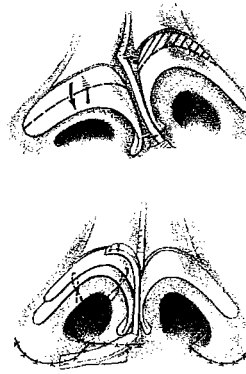
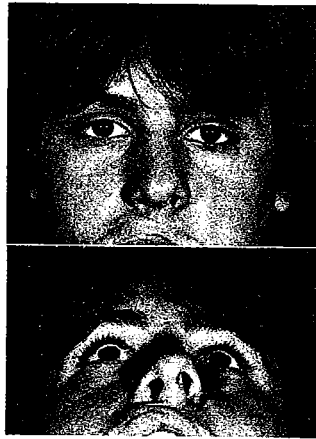
19 years

THE ALAR CARTILAGE OVERLAP



If the slumped lower lateral alar cartilage on the cleft side is reasonably wide, it can be split horizontally and the distal half freed from the skin with right-angled scissors. The proximal half is freed from the skin also and from its mucosa, so that it can slide over the distal alar cartilage. Two sutures, passed through the skin within the vestibule just under the alar rim, are carried over the freed distal alar cartilage, picking up the freed proximal alar cartilage and returning by the same route. Tying these sutures draws the proximal cartilage half on top of the distal half in an effective and efficient *overlap*, lifting the slump and doubling the contour of the flat tip. Any excess mucosal lining can be trimmed prior to suturing.

This overlap is getting exciting results



When the alar cartilage is narrow, then, through an intercartilaginous incision, the upper lateral cartilage is freed and pulled with sutures in similar fashion to overlap the lower alar cartilage.

