

53. Long Upper Lip

THE lip that is long in the vertical dimension is seen most often under three circumstances:

1. The surgeon, in a misguided effort to lengthen a prolabium he considers too short, introduces composite flaps of skin and vermilion from the lateral lip elements below the inferior edge of the prolabium.
2. Some lengthening may also occur when the lateral flaps are introduced above the prolabium.
3. In complete bilateral clefts, when the prolabium has been cut free from the nose during columella lengthening in the infant or very young child, the strong lateral lip musculature pulls on the unanchored prolabium. In many cases this persistent traction during the growth period gradually stretches the lip in the vertical dimension.

CORRECTING LIPS WITH LATERAL COMPOSITE FLAPS BELOW THE PROLABIUM

Usually the composite lateral lip flaps have been introduced below the prolabium primarily to lengthen a seemingly short central element and secondarily to avoid dragging the nasal tip quite so far down into the lip. Such disjointed allotment of upper lip tissue tightens its transverse dimension while increasing its vertical length, which, with eventual stretching, will be exagger-



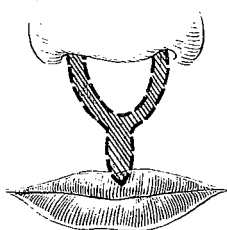
ated into a tragically comical curtain. These inferior flaps can be triangular (Mirault-Rose-Blair-Brown), joining tip to tip, or quadrilateral (Maas, Hagedorn, LeMesurier, Barsky), joining square end to square end. The amount of lengthening is in direct proportion to the width of the inferiorly transposed flaps. Thus the quadrilateral flap is potentially the champion lip lengthener.

This entire fiasco has also been branded with an unbelievably unnatural position of scars that cannot ever be completely "unscrambled." To add insult to injury, the short columella and depressed nasal tip usually are still respectively short and depressed. If then a flap is taken out of the center of the prolabium for columella lengthening, not only is another vertical scar added to the previous two but the columella usually remains inadequate.



SHORTENING THE VERTICAL LIP LENGTH

If the columella has won out in this type of surgical proportioning with the lateral lip elements joined beneath the prolabium and is of sufficient length, then shortening the vertical lip length and correction of the unnatural position of the scars get priority. Some surgeons have been content with just shortening the lip. Various methods have been proposed, none of which end up with an artistic final result.



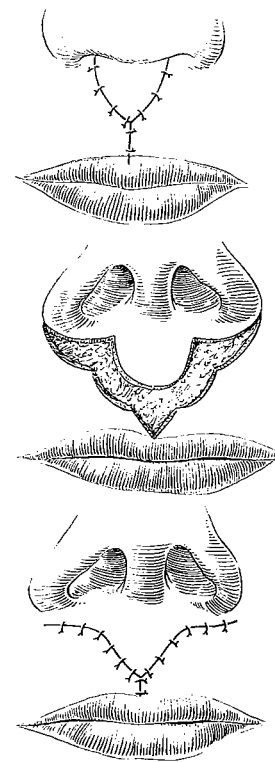
Erich

Erich, of the Mayo Clinic, reduced the vertical length of the lip by excision of the bilateral scars and reduction of the length of

the prolabium. This maneuver does shorten the lip in direct relation to the amount of inferior prolabium amputated but does nothing about the unnatural shape of the Y scar in the philtrum area.

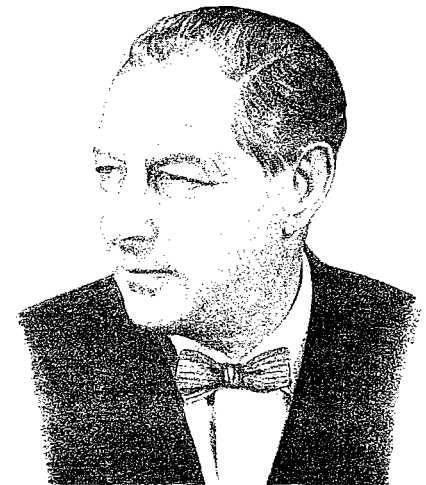
Vaughan

Along a similar but more radical pattern Vaughan designed a shortening of the vertical length of the lip in 1940. With the old bilateral scars in his line of action and with extensions lateral, he resected the scars and the desired amount of tissue not only from the inferior border of the prolabium but also laterally from the nasolabial junction. With the resection shaped not unlike a Viking's winged headpiece, the upper lip is shortened in its vertical dimension along its entire width. Here again, however, the resulting winged scar makes no pretense of imitating a philtrum.

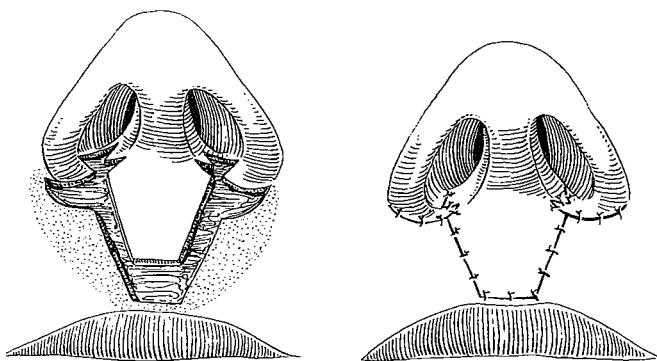


Ragnell

In 1946 British-trained Alan Ragnell of Stockholm designed a similar scar excision in bilateral cleft lip which served to shorten a long lip and medially rotate flaring alar bases at the same time. This, at least, produces scar configurations that fall somewhere within the general area of natural landmarks and seems to be the best of this series of total lip-shortening procedures.

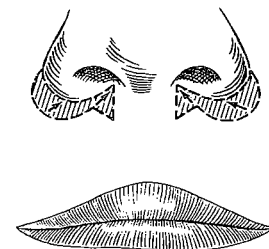


Alan Ragnell



Holdsworth

When the central vertical length is near normal and the scars are reasonable but the lateral lip is too long vertically on each side, a variation of Holdsworth's subalar excision will achieve shortening and place the scars in natural creases.





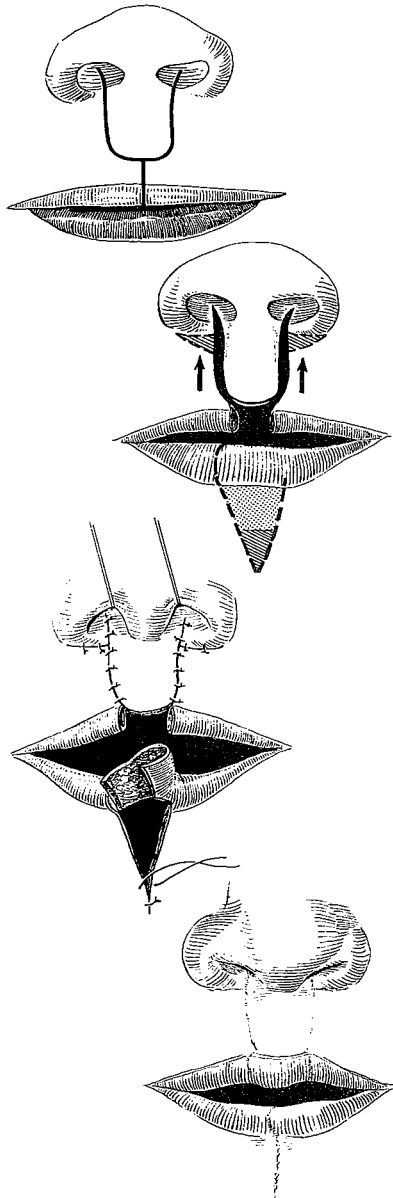
Rex Peterson

ADDITION OF VERMILION FLAP

Rex Peterson, the sophisticated plastic surgery cowboy of the Arizona Crippled Children's Hospital, Phoenix, with Ellenburg and Carroll in 1966, warned that the apparently

deficient prolabium in bilateral cleft lip should not become a surgical trap.

For those cases already caught by the introduction of lateral lip flaps beneath the prolabium, he has corralled an interesting combination of procedures. Again, the rare condition of sufficient columella length was assumed, but the upper lip was horizontally tight, vertically long and mismatched by a protuberant lower lip. Rex's rodeo freed the prolabium, shortened the lateral lip segments by wedge excisions along the nasolabial line and ended up with a true swayback whistling deformity. His final roundup reduced the lower lip by cutting an Abbe flap out of it and, after trimming off the skin portion, turned the remaining portion of the flap to fill the defect,



incorporating *only* the vermilion margin, the muscularis and varying amounts of labial mucosa.

In principle, this vermilion-bordered flap is somewhat similar to one described in 1957 by Gillies and Millard.

In 1973, O'Malley of Orlando, advocated a similar "skinned Abbe" for secondary bilateral clefts presenting a whistling deformity and lack of an upper labial sulcus.

Such multiple corrective actions as designed by Peterson are not as "rough riding" as they may seem because he has repositioned his brands more compatibly with the philtrum, has shortened the vertical lip length and has reduced the relative excess of the lower lip.

If the lower lip were not redundant, it is possible, after excision of the flaps of skin beneath the prolabium, that there would be enough mucosa available to fill the whistling deformity without a form of Abbe flap.

DOUBLE TROUBLE

When the lateral lip elements have been joined beneath the prolabium resulting in *excess vertical lip length* and the *columella is still very short*, a most infuriating secondary deformity is presented. Some cases have been treated by excision of the flaps beneath the prolabium in a radical cupid's bow procedure. Use of this procedure to shorten long bilateral cleft lips calls for some modification, as indicated by Gillies and Kilner:

When the "cupid's bow" operation is being used to shorten the "up-and-down" length of the lip, obviously the central point cannot remain fixed; the entire vermillion border, therefore, must advance up and the lower border of the orbicularis be trimmed shorter before it is nicked at the cupid's bow.

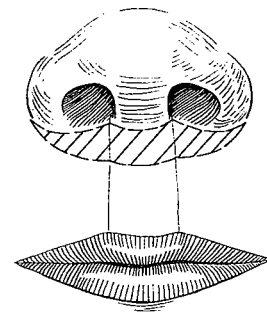
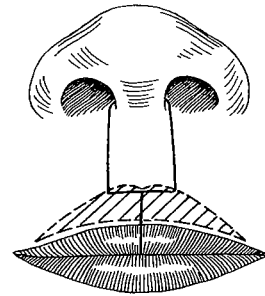
Thus the vertical length of the lip is reduced and the misplaced flaps are removed. Yet the columella is still lacking in length, which cannot be spared from a lip that is already too tight from side to side. This inadequacy led to another approach, as demonstrated on pages 665-667.

PERSONAL LIP SHORTENING BY SIMPLE EXCISIONS

The most effective vertical shortening of a long lip, if all other labial and nasal aspects are satisfactory, is the transverse full-thickness excision of the required amount of superior upper lip along its entire join with the nose. Variations in the execution of this action depend on the specific case, but it is seldom that a bilateral lip is only too long and just as rare that mere shortening will complete the correction.

Discarding skin below prolabium

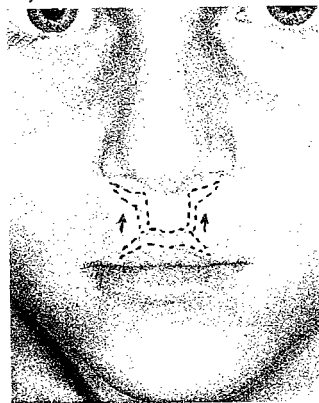
This patient, born with an incomplete bilateral cleft of the lip, was one of twins, and his twin had an incomplete unilateral cleft. The bilateral cleft was treated in infancy with what appears to



have been a Brown-Barsky type of closure. The introduction of lateral lip flaps below the prolabium did not pull on the almost adequate columella but did tighten the lip from side to side in its lower portion and produced unnatural scarring and vertical lengthening.



7 years



All scars bordering the prolabium were excised, and all skin except the mucocutaneous ridge was excised from between the inferior edge of the prolabium and the vermilion. The lip shortening in this central segment was balanced by bilateral full-thickness wedge resections transversely in the upper lateral lip elements at their join with the alar bases and nostril sills. This procedure placed the prolabium in a more natural philtrum position, shortened the long lip and actually improved its relationship with the lower lip.



8 years

COMBINING LIP SHORTENING WITH OTHER CORRECTIONS

As will be seen in specific long lip cases, scar excisions, the forked flap, total prolabium-into-columella followed by an Abbe flap—all can be used to improve scars, lengthen columella and construct a philtrum, but with extra effort they can be forced to shorten a long lip. Of course, this action is dependent upon simultaneous shortening of the lateral lip segments and keeping the Abbe flap short enough (average 1.3 to 1.5 cm. skin length). Remember, the model upper lip at rest should expose the inferior one-third or slightly less of the upper incisors.

PERSONAL CASES

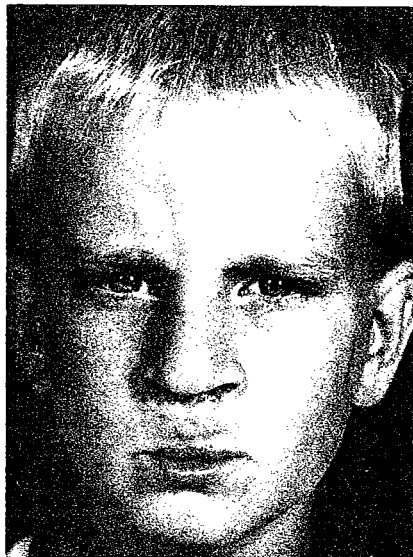
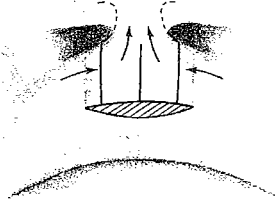
Prolabium into columella and Abbe flap

Evidently this bilateral cleft lip and palate had been treated in infancy with lateral lip flaps sutured to each other below the prolabium. At two and a half years there must have been an attempt at columella lengthening. At six years, the columella was still short with a flattened nasal tip and flaring alae. The upper lip hung long like a curtain, marked with three vertical and one transverse scars, showed very little free border vermilion and was slightly tight in transverse dimension. The lower lip showed some protuberance.



6 years

A center portion of the prolabium was shifted into the columella and the lip shortened in vertical length by skin excision of a portion of the inferior flaps above the mucocutaneous junction.



6½ years



A year later a small shield-shaped Abbe flap was transposed into the center of the lower two-thirds of the upper lip, after scar excision, and the pedicle divided in 13 days.



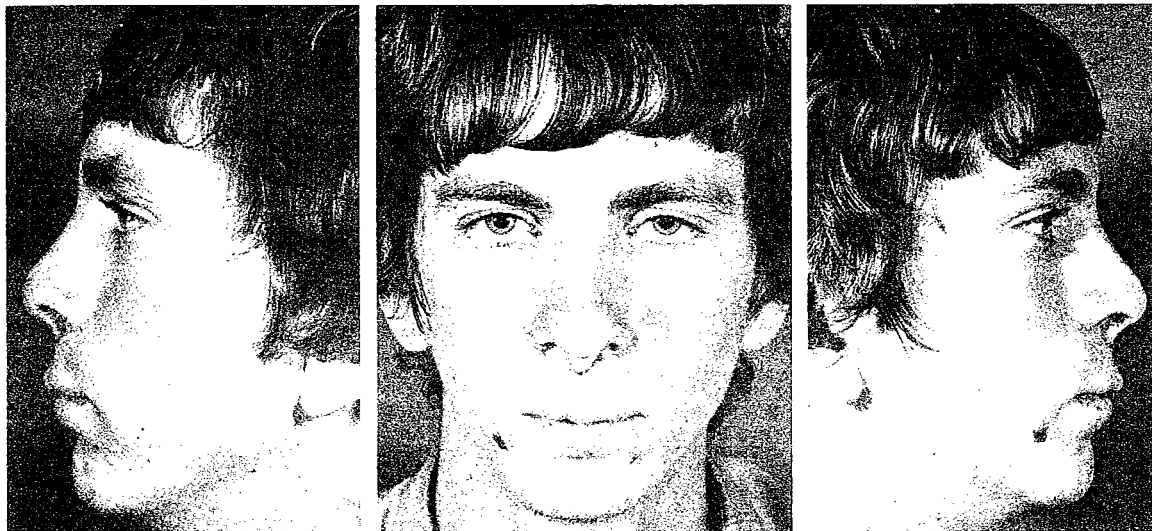
7 years

At age 15 years corrective rhinoplasty included reduction of alar cartilages, lowering of nasal bridge, shortening of septum, bilateral osteotomy, alar base wedge resection, alar margin sculpturing and cartilage strut from the bridge inserted into the columella to support the nasal tip.

R.R., A.B.1
A.R.1, C.S.

One year later, submucous resection and diamond excision of skin reduced tip-columella thickness. After another year, alar base flaps were dissected into skin flaps and subcutaneous flaps. The subcutaneous flaps were sutured to each other with Mersilene at the septum behind the columella base with reduction of the alar flare. The alar skin flaps were slid across the nostril floor toward the columella to create the nostril sills.

S.M.R.
A.B.3



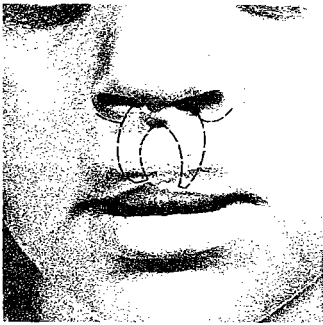
17 years

Forked flap

This bilateral cleft of the lip and palate was treated with composite flaps of skin and vermilion from the lateral lip elements placed below the prolabium. Then, to add insult to injury, as has been done so often, a flap was taken out of the center of the prolabium to lengthen the columella partially. Photographs of this girl at six years of age show a projecting premaxilla, a flat nasal tip with flaring alae and a small blob-like columella. The lip is vertically long, hanging like a curtain and tight along its free border. The scar pattern of three vertical and one transverse has caused irreversible marking of the lip.



6 years



At nine years a forked flap, incorporating the bilateral scars and reducing the square prolabium to a narrower, more philtrum-like central component, lengthened the columella and released the nasal tip moderately. In addition, the ends of the fork splayed into the nasal floor to join the alar bases to form nostril sills. This procedure was followed later with a minor cupid's bow correction.



12 years

It will be necessary to remove the entire scarred prolabium, advance the lateral lip elements and fill the defect with an Abbe flap. A reason to postpone this as long as possible has been the lack of slack protuberance of the lower lip.

A switch and then a fork

Here is an interesting plan specifically designed for the case with lateral rectangular flaps joining each other below the prolabium, which also suffers a short columella and a long upper lip.

To correct vertical length and columella shortness a rather complicated but logical rerun in reverse of the first abominable operation picked up the lateral lip flaps from their stuck-on position below the prolabium and replaced them in their original position in the lip on either side of the prolabium. These flaps were composed of skin and subcutaneous tissue, leaving the vermilion mucosa to border the inferior edge of the prolabium. Thus the vertical height of the lip was shortened and tissue positioned for columella use. Later these repositioned flaps were incorporated into a regular forked flap and were shifted into the columella with nasal tip release. Even after all the finagling, the lip ended up with only two vertical scars. An example follows.

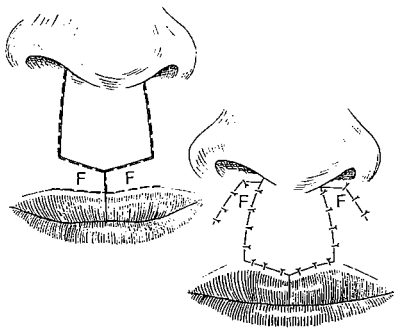
Recuperating the forked flap

A bilateral complete cleft of the lip and palate in 1966 had composite flaps including skin from the lateral lip elements transposed below the prolabium as a primary Jalaquier-Hagedorn-Barsky procedure. At age two and a half years the patient came under my care and, as would be expected, revealed a *long vertical lip unnaturally scarred and a short columella.*

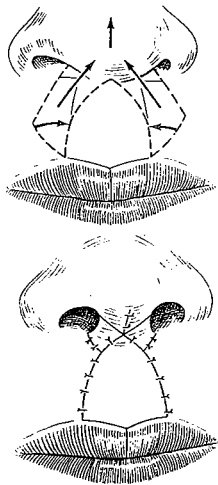
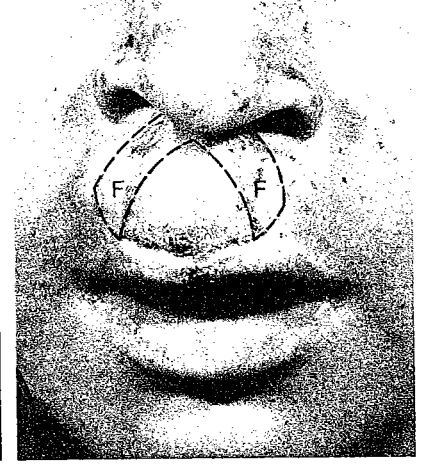
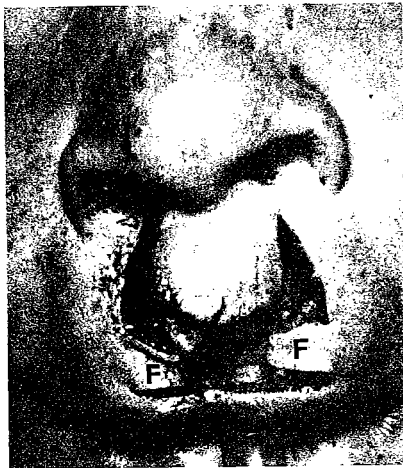
*a switch!
replace the
mistake and
proceed.*



At age four years, through-and-through incisions were made along the old scars around the prolabium. Then two skin areas F



and F were taken as flaps and transposed back where they came from along the sides of the lateral elements. The mucosa beneath them was used to deepen the upper labial sulcus, and the free border vermilion was merely elevated and sutured along the inferior border of the prolabium where it belonged in the first place.

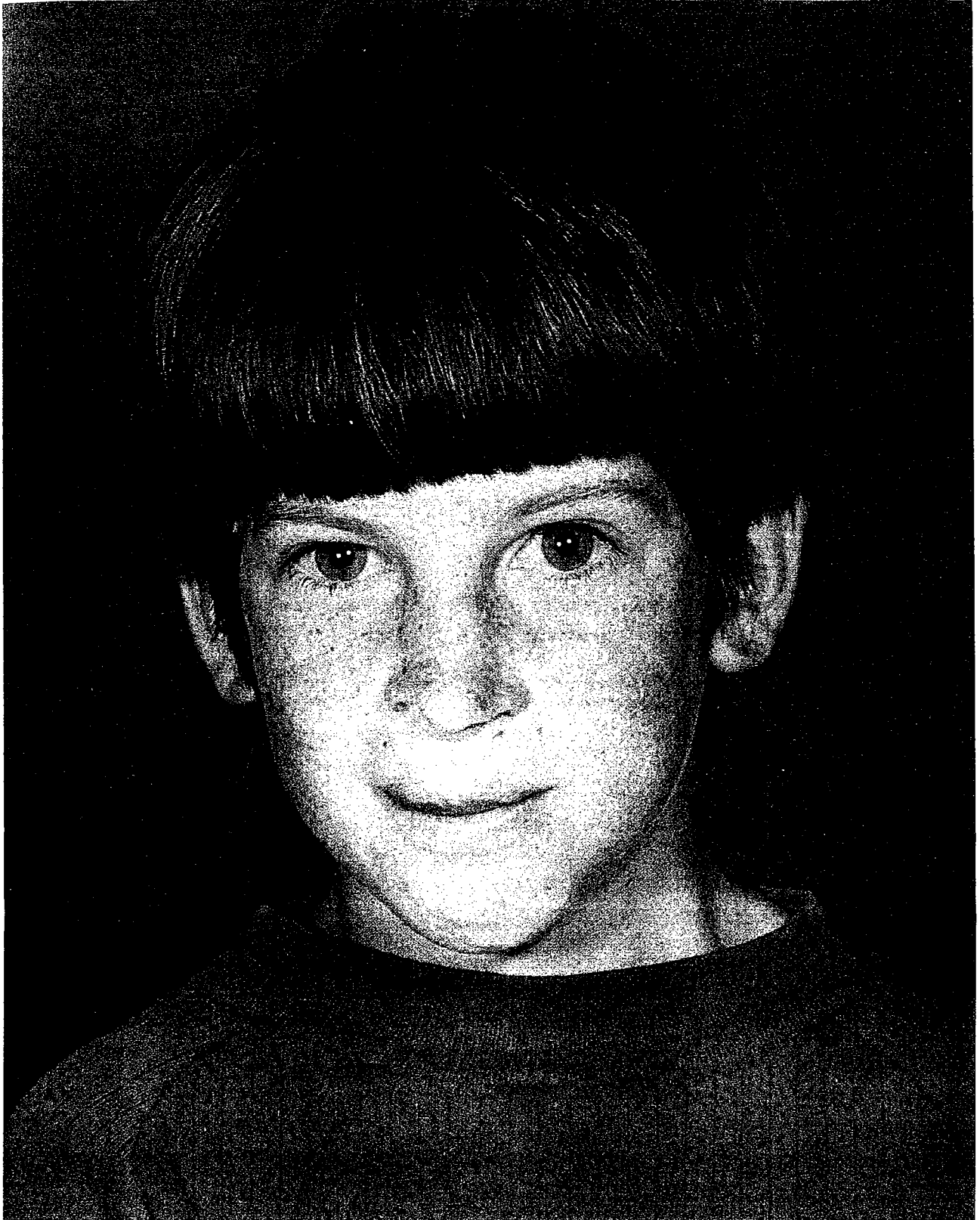


Four months later, delay incision inscribing a forked flap and including these replaced skin flaps was made. Then, five weeks later, a forked flap was cut. It was elevated with the aid of a membranous septal incision, and the alar cartilages were exposed and sutured together. The prongs of the fork were approximated and advanced along the septum with release of the nasal tip. The lateral mucosa and muscles were sutured together behind the prolabium, which maintained its viability through its vermilion border attachment.



7 years





Because of the persistent excess protrusion of the premaxilla, the lip lost some of its shortening, but with the aid of orthodontia by Berkowitz the alignment was improved. In 1974, revision with lip shortening, muscle reapproximation and dimple formation was completed. It might almost be said that this "egg" had been unscrambled.



10 years

Prolabium into columella and Abbe flap

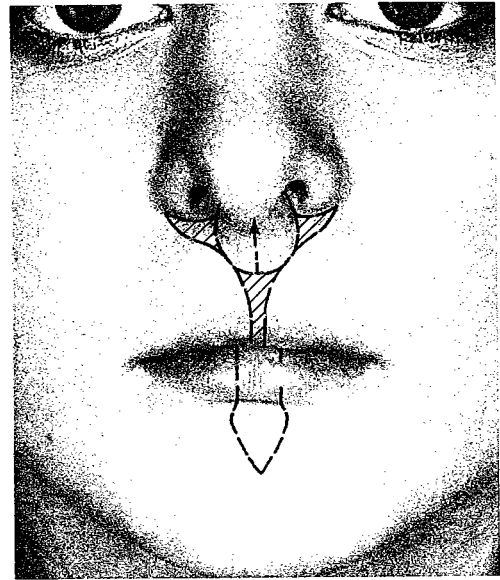
An incomplete bilateral cleft was closed in Chicago by the Blair-Brown triangular flap inserted below the prolabium. At five years the patient had a long lip with a Y-shaped scar, no cupid's bow, philtrum or tubercle and a short columella with a slightly restrained nasal tip.



5 years



Excision of scars included some skin to transform the triangular flaps into quadrilateral flaps in an attempt to create the LeMesurier cupid's bow. This was only partially successful so 10 years later more radical surgery was used.



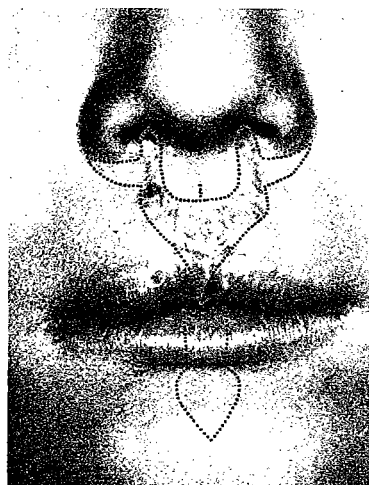
15 years

The prolabium was elevated out of the lip and the anterior septum shortened to correct the hanging columella. Then the prolabium was reduced, advanced into the columella base, split and sutured to the alar bases. The upper lip was divided, and the lateral lip elements were advanced medially to the septum and sutured with 4-0 Mersilene to create a philtrum-sized midline defect. A shield-shaped 1.7 cm. Abbe flap was transposed into the center of the upper lip and the pedicle divided after seven days.



16 years but early after surgery

This 9-year-old boy with a bilateral incomplete cleft of the lip had bilateral composite flaps placed below the prolabium in Cuba. This presented a long lip with unnatural scars and a short columella. At age 10 years, the scars were excised as marked, including bilateral triangles from the upper portion of the lip bilaterally to shorten the vertical length of the lateral elements. The prolabium was advanced into the columella and the lip elements advanced medially, presenting a philtrum-sized defect. A shield-shaped Abbe flap was transposed into the philtrum position with its tail inserted into a split in the prolabium base. The pedicle was divided after one week.



10 days after division of pedicle

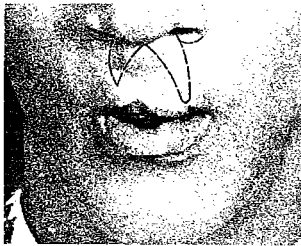
Forked flap and rhinoplasty

A bilateral cleft lip and palate patient with mild hypertelorism had undergone numerous procedures. At age 14 years, the lip and nose revealed the specific fallacies of the standard principles used. The prolabium, trapped between the columella and the lip, served neither well. The short columella had snubbed the nasal tip spatula flat. Lateral lip flaps had been pulled together below the

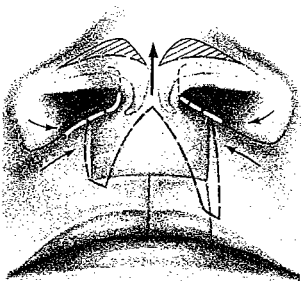


14 years

*"If at first
you don't
succeed, try,
try again,
can be quite
scarring!"*



R.R.



R.R.

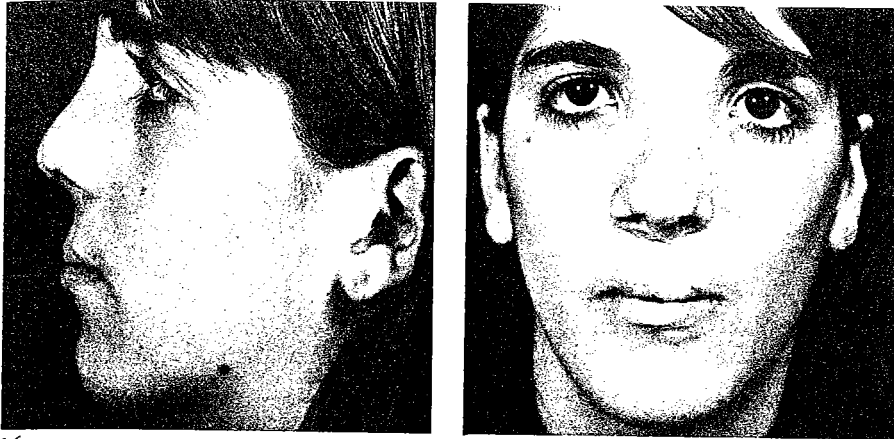
prolabium causing the lip to be long in vertical length but tight from side to side, particularly along its lower border. The situation had provoked the surgeon to insert a small Abbe flap unilaterally to relieve this specific tension.

A surgeon must have the *ideal normal* as his goal and set his aim and plan his surgical campaign accordingly. Otherwise, his is but a craft darting hither and thither in open seas with enough fuel but no charts, no compass and an uncertain destination. One error is followed by another, each launched to correct the last but merely compounding the problem by adding insult to injury to the point of irreversible disorder. This was a difficult deformity from the beginning, no doubt, but there was even less chance of total recovery now.

At age 15 years, a modified forked flap incorporating the bilateral scars and portions of the prolabium was used to lengthen the columella and partially release the nasal tip. A reduction rhinoplasty lowered the nasal bridge and narrowed the bony base.

Subsequent corrective procedures over the next four years were too numerous to describe in detail. They did include a cupid's

bow operation, alar base advancements, alar margin sculpturing, bilateral osteotomies, a vomer strut in the columella, a Silastic sponge chin implant, lip scar revisions and abrasion.



16 years

One time during the latter part of this period, when I thought the patient was progressing reasonably well considering her original problem, a kind woman befriended her. The new acquaintance assisted the patient in getting a room and then inquired into her financial status, saying, "Dear, I would like for you to see a good plastic surgeon." Whereupon my patient loyally explained she already had one!

S.C.S.1
A.B.2
A.R.1



19 years

At age 20 years, the patient had a baby boy with a complete unilateral cleft of the lip which was treated with a rotation-advancement closure. Since then she has had two babies with bilateral cleft of the lip and palate, one with the alveolus intact on one side and one complete with projecting premaxilla.

Abbe flap and lip-shortening procedures

This classic story of a long lip is a special favorite of mine, but you have to follow it play by play to understand why. Born with an asymmetrical bilateral cleft lip which was closed at two months and revised at 17 years, Sheldon Gloger, at 34 years, had an asymmetrical nasal distortion with the prolabium trapped above the lateral lip flaps, which joined each other below it. In the spring of 1972 a letter from this patient arrived in Miami. Here are excerpts:

Why I travel so far . . . very suspicious of doctors because of previous bad experiences. I searched cleft lip literature for problems similar to mine. . . .

<i>lip:</i>	<i>nose:</i>
tight	depression of nasal tip
stiff	alar cartilage protruding into right nostril
scarred	

When not smiling, my lip gives impression of anger and meanness. When smiling, my upper lip does not move hiding the smile. To project a smile, I must force movement of the lip with many facial muscles.

The patient was seen in Miami, and an Abbe flap was proposed.



One month later he wrote:

One item worries me. Unfortunately I was too shy to mention it during consultation. The previous operation . . . resulted in too long a vertical length in the upper lip. It hangs one centimeter below the upper teeth, hiding the teeth from view even when laughing.

Will your operation improve this?

My answer:

Your upper lip does not look long in your smiling photographs. . . . When we shorten your nose, this will increase the effective length of your lip but, if necessary, I can shorten the actual length when the Abbe flap is inserted.

On August 8, 1972, the midline scar of the lower portion of the upper lip was excised and the prolabium reduced and shifted onto the columella base. Then the lip was opened in the midline and a 1.5 cm. (skin length) Abbe flap was inserted giving release, symmetry, and a philtrum to the upper lip. The pedicle was divided after 10 days.



Ten days later he wrote:

Your Abbe flap is masterful. I now have a normal lip and corrected nose for the first time in my life. I mentioned disappointment at not having a shortened lip only as an honest reply to your questioning.

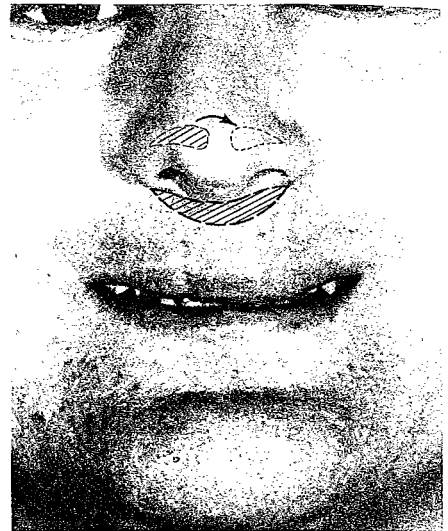
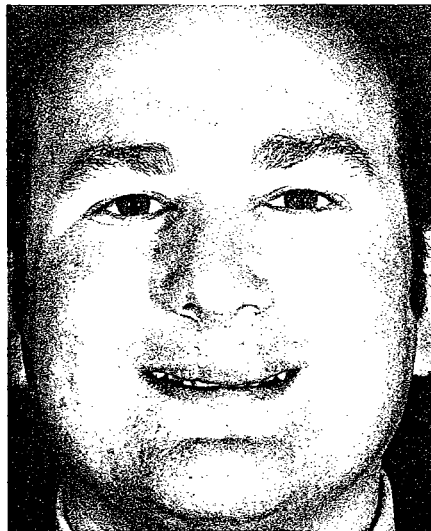
Four months later he wrote:

The sag while smiling or laughing is terrible—like an old man with his dentures out—both comical and hideous. Even with a forced grin, the sag still covers the upper teeth. This is a great handicap to my work where talking, with pleasant facial expressions, is important. My lip is still quite stiff. Is it possible the sag will improve when the stiffness disappears?

If my problem were corrected by further surgery, what would be the harm?

My response:

Give the lip another month or two and then we can shorten it.



Six months after the Abbe flap operation, the alar cartilage was reduced on the right and grafted as an onlay on the left, the septum was shortened and then a full-thickness transverse wedge, 1 cm. wide, was excised across the entire upper lip along its join with the nasal base. With smiling the upper teeth were exposed, but he wanted it shorter!

Seven months after the lip shortening the patient wrote:

During the operation your assistant said it was shortened 8–11 mm. One day after the operation I had the same overly long upper lip, the same toothless smile as I have today. What happened?

My response:

I am sorry that you are not pleased with the excellent result. We can go ahead and do a little more work if you would like.

This was his response:

Thank you for your courteous reply and offer, but no, I won't be coming to Miami anymore. You have done what you promised. . . . It seems I did not communicate well what is extremely important to me: a shortening of my overly long lip that hangs like a wet curtain when I smile or laugh. Now I do insist. I want my upper lip shortened a full $\frac{1}{4}$ inch. Nothing else will do. That or nothing. So, I must seek another specialist. . . .

I have already consulted several plastic surgeons who have offered to attempt a $\frac{1}{4}$ inch shortening, each by a different method. . . . You know my lip better than anyone, what harm might I expect if a $\frac{1}{4}$ inch shortening is attempted?

One surgeon wants to operate under the nose, from nasolabial fold to nasolabial fold; another wants to excise "all the way through," another surgeon would operate just above the red line of the cupid's bow; one plastic surgeon feels that the lip has already had too much surgery, another surgeon wants to "tuck under and up" the whole visible mucosa. None of these fine gentlemen have performed such an operation, which scares me, although there is a reference to this problem showing before and after photos (Holdsworth, W. G., *Cleft Lip and Palate*, 4th Edition, 1970, pp. 160-161).

As a last service, please tell me some things to help me finally get the job done or convince me that it's a lost cause.

My response one week later:

No, it is better that I do this for you and at no charge. I want you as happy as possible. I did shorten you over a $\frac{1}{4}$ inch before, but it will take more and my hope would be to let a small amount of your upper teeth show.

His answer:

O.K. Set me up for the operation as soon as possible—whenever. I will drop everything and fly to Miami.

He enclosed photos to show "our" lip at repose, smiling and grinning and illustrated with a couple of his own arrows.



Repose

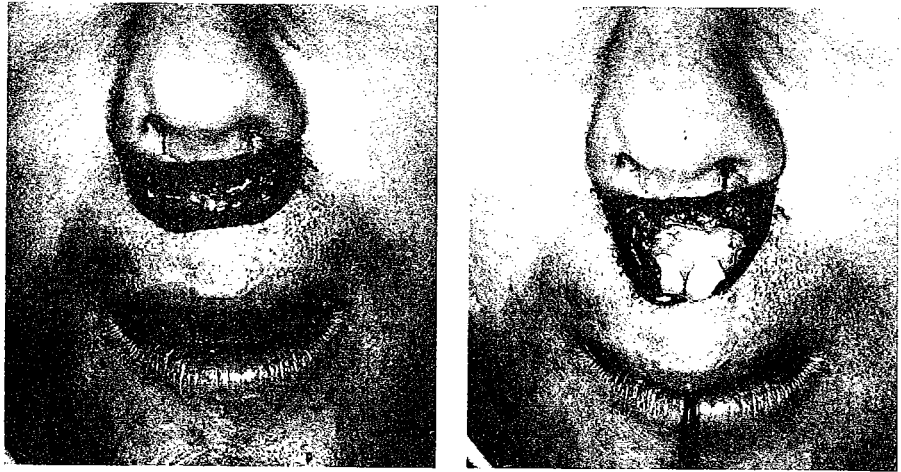


Smiling



Grinning

So, 10 months after the last lip shortening, a 1 cm. wide, transverse, full-thickness ellipse of upper lip skin, muscle and mucosa was excised from alar base to alar base. During the operation the patient was encouraged, "Sheldon, at least I can say at this time your teeth are easily visible *through* your lip!"



The defect was closed as the lip was lifted and sutured to the nasal base with exposure of the lower one-third of incisors at rest. On the fourth postoperative day the sutures were removed.



My note in the patient's chart after this visit stated:

Shortest lip in Miami, but swollen. Lip measures approximately 11 mm.

Eight months later, not having heard a word from the patient, I wrote asking how he was, terrified that he would write, "Only one thing, doctor, you have made my lip too short!" Instead, he

wrote four and a half single-spaced typed pages, but the message can be condensed to:

I only wish you had taken more out during your last operation.

He did give me an even clearer insight into his magnificent (lip) obsession when he wrote:

Some fine experiments were carried out by psychologists, as reported in Krech and Crutchfield. Volunteers were fitted with masks that hid all but one feature of their faces. In some, it was the mouth that showed, in others, only the eyes, etc. Then these people were subjected to various stimuli (electric shock, tickling, onions for crying, etc.). . . . Observers, unaware of the stimuli, were facing the masked volunteers and were asked to judge the emotions, their only guide being the expressions of one facial feature. Conclusion: only the mouth region communicated the person's true feelings. And this is something I knew from experience, ever since that operation at age 17, I suddenly wasn't being understood by in-person contact. My upper lip, inflexible, long, hiding the teeth, could not reflect my emotions. . . . Look at motion picture actors and actresses. It amuses me to notice that the bad guy, the heavy ugly in a film, may have a scar on the forehead, a hooked nose, an eye that half opens or a missing ear. But, in all cases, this horrible creature has a beautiful mouth, excellent set of teeth, and his use of that mouth region is what produces the intended aura. Only I notice it, but it's very true.



These are photos he had taken for this book in Mark Gorney's office. In spite of what scurrilous letters Sheldon may write me in the future, I am proud of his result as he is now quite handsome.

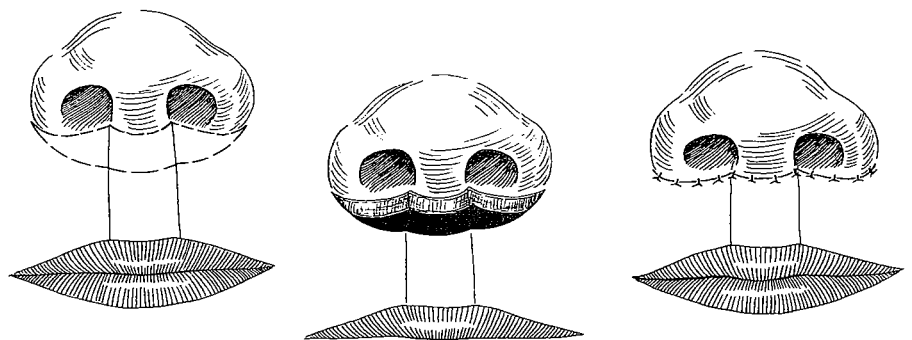
Resident Tony Wolfe, slightly obsessed with bony structure and teeth prior to his year with Tessier and Obwegeser, after reviewing this case suggested:

It would have been easier to lengthen his teeth!

*Lip lengthening following early division
of columella and prolabium*

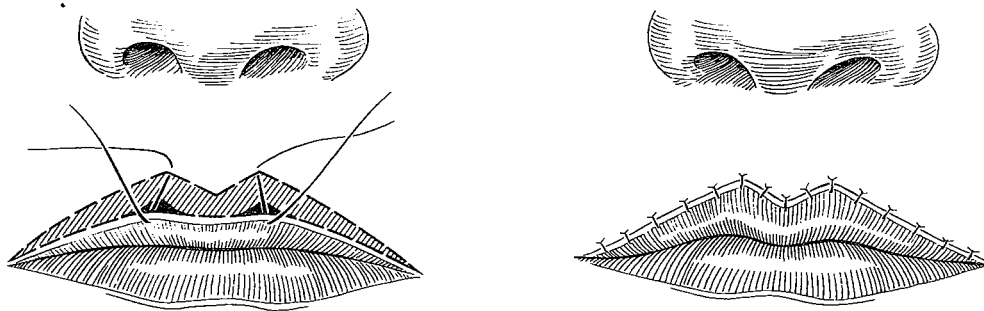
When the lateral lip elements have been introduced across the top of the prolabium until they meet tip to tip as in the original adaptation of the rotation-advancement principle in bilateral clefts, this action can also lead to lengthening of the lip vertically. If the complete division of the columella base from the prolabium is carried out in infancy or early childhood, the chances of the baby's pulling a long lip are enhanced. If the division is postponed until five years of age, there seems to be less vertical lip lengthening. In cases that have developed vertical lengthening there are two main methods of shortening. Again, the procedure should be postponed until school age.

SUPERIOR. If there is a natural mucocutaneous ridge and cupid's bow as usually created with the rotation-advancement principle, then a transverse superior full-thickness excision along the join of the lip with the alar bases, nostril sills and columella is the method of choice.

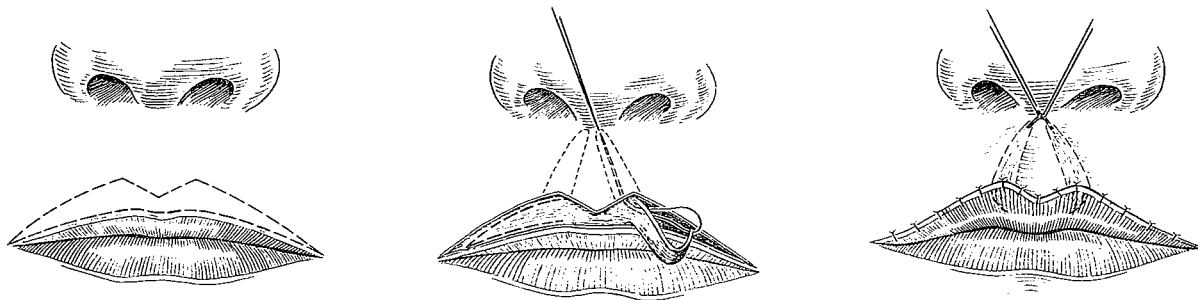


INFERIOR. If the mucocutaneous junction, cupid's bow and vermilion free border are unnatural and scarred, requiring radical

adjustments, then Gillies' cupid's bow operation can be used to revise the bow and also shorten the vertical length of the lip. Leave the mucocutaneous junction "white roll" with the vermilion if it is still present.

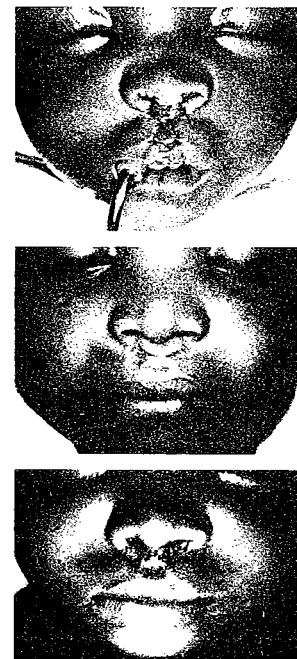


Or, even better, use my modification, which creates not only a bow but philtrum columns and a dimple and at the same time shortens the vertical lip length but retains the white roll.



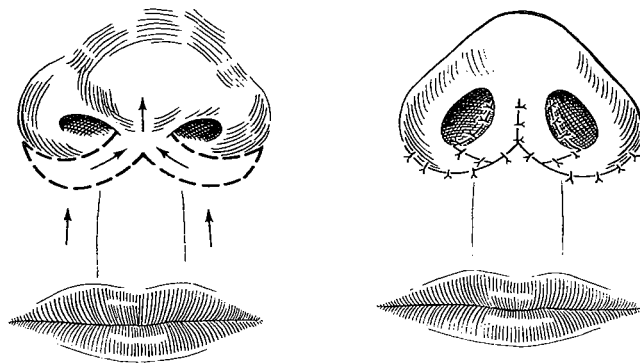
After early forked flap

An early forked flap in a complete bilateral cleft places tissues in their correct position during the surgery. Yet, with the complete division of the lip attachments to the columella during infancy and early childhood, when muscle pull exaggerates growth, the lip develops too long in its vertical dimension. The lack of septal support in the nasal tip also allows the forked flap to slip partially back down into the lip. By re-advancing the forked flap up into the columella, supporting it with a temporary homologous septal cartilage strut (if under 16 years) or autogenous septal cartilage (if over 16 years) and lifting the lip will achieve and maintain nasal tip elevation and lip shortening.

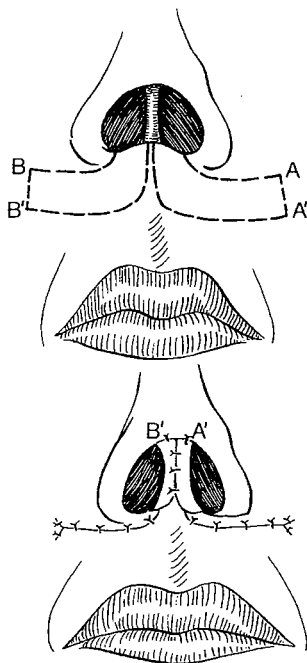


SHORTENING LIP WHILE AIDING COLUMELLA

When the lip is long but the columella short or retracted, it is well to use in the columella what must be taken from the lip. The lip shortening can be accomplished by transverse excision of wedges of skin, subcutaneous tissue and whatever sparse muscle is present from very high in the lip along its join with the alar base and nostril sill. If this tissue is not amputated but is based medially on the sides of the columella base, it can be advanced on each side medially and upward, like the forked flap, along the incised membranous septum to increase the columella length and at the same time elevate and shorten the long lip.



If there is columella retraction, these flaps can be based medially inside the vestibule and transposed out of the lip and into a columella releasing membranous septal incision as described in Chapter 47.



This is the same general principle as described in 1919 by John Staige Davis of Baltimore for reconstruction of the columella. He advocated bilateral transverse skin and subcutaneous tissue flaps raised from the upper lip and with the raw surface turned inward toward the midline, sutured together, skin surface outward. The free end of the approximated flaps was sutured to the tip of the nose. As Davis explained:

This type of operation for reconstruction of the column is suitable only for those cases in which the upper lip is very long. It accomplishes the double purpose of shortening the lip and forming the column.

Of course, the modern modification has refined the procedure appreciably.