

15. Modifications

SKOOG

AMONG those surgeons attracted by the rotation but evidently unable to get the desired result was the dynamic and precise Tord Skoog of Uppsala, Sweden. Inadequate rotation forced him into a combination of the rotation-advancement and the inferiorly placed triangular flap of Tennison. It is best explained in his own words, appearing in the same 1958 *American Journal of Surgery* honoring Gillies, under the title "A Design for the Repair of Unilateral Cleft Lips."

In 1952 Tennison published a modified design for repairs of single hare-lips. . . . In 1955 Millard presented a new design for this type of repair. . . . I have used these two methods in cases of unilateral cleft lips with varying degrees of deformity, and the operative results with both methods have been very satisfying, particularly in incomplete clefts. The former method, however, involved considerable sacrifice of tissue in complete clefts, and using the Millard technic I found it difficult to avoid retraction of the scar line at the vermilion border. Based upon this experience a repair was designed which used two flaps for elongation of the cleft side.

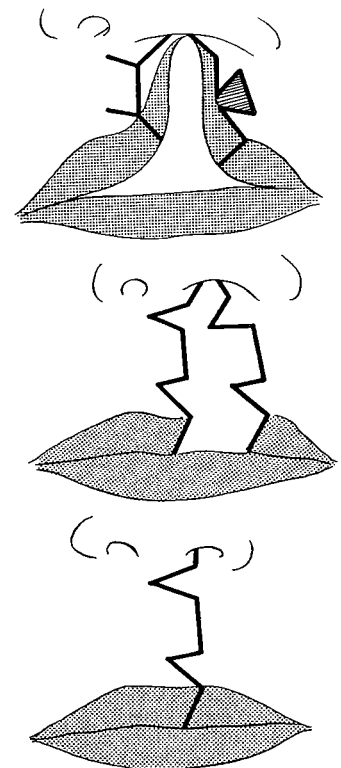
Actually, in 1958 Skoog finally chose for his upper flap a vertical one based above, which he transposed horizontally at the columella base. This portion of the design was similar to Trauner's earlier method. His lower flap was a Tennison type which achieved a double darting of the cleft edge.

As noted by Skoog, Trauner of Austria had also described closure of single cleft lips using two flaps:

Trauner combined a modified Hagedorn-LeMesurier technic with his original Z-plastic procedures for secondary correction of the nostril floor and upper part of the lip.



Tord Skoog

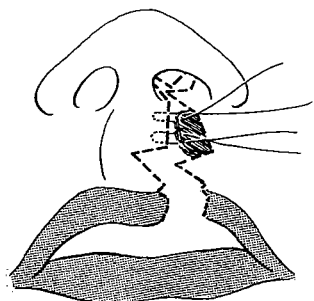
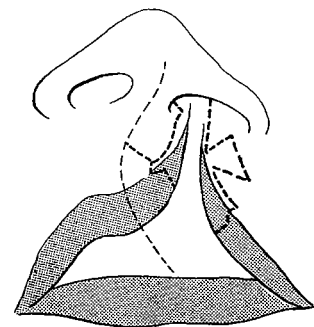
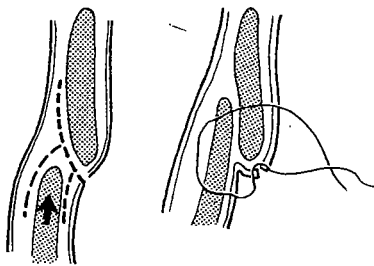


one is better than two!

One adequate rotation incision can position the non-cleft element into normal position better than two small releases and at the same time avoid discard of tissue as well as inferior violation of the philtrum column and the dimple. When the healing produces a good scar, Skoog can show what many consider to be excellent results in spite of the unnatural position of the scar. Nevertheless, I feel in principle this modification is a step backward.

It is interesting to see why Joss and Rouillard in 1962 preferred the rotation-advancement "cut as you go" approach over the methods of Trauner and Skoog:

In this respect Skoog's method, which incorporates a Z-plasty resembling Tension's, may be described as an advance over Trauner's method wherein a modified LeMesurier technique is used. However, the scar in Skoog's repair does not correspond to the philtral column and his design lacks the great merit of simplicity.



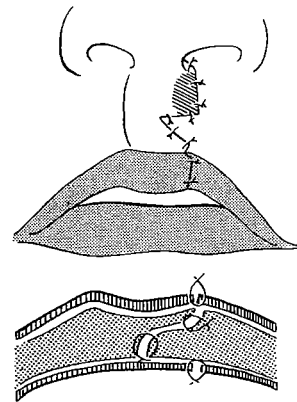
In 1969 in the *Scandinavian Journal of Plastic and Reconstructive Surgery* and again at the Melbourne Congress in 1971, Skoog added a modified Reynolds-Horton type of alar lift as a primary nasal procedure along with his periosteal repair for the alveolar and maxillary deformity and advanced the cleft side lip muscle toward the midline. He also revised his unilateral lip method, making more of the lower triangular flap and less of the higher vertical-to-horizontal nasal floor flap, which he by now had moved farther back into the nasal vestibule, like Collis and Blair, than in his earlier design, which was more like that of Trauner.

There is an interesting story in relation to this switch. While on his Foundation Award study trip in Europe in 1959, Peter Randall visited Tord Skoog in Uppsala. One evening after smorgasbord and a series of "skoals," Skoog asked Randall why he put his little superior flap inside the nostril and not at the base of the columella where it was needed for release. Randall explained that in his opinion it did as much good inside and the scars were hidden. A few more "skoals" and Skoog suggested a bargain: that Randall try placing the upper flap at the base of the columella and he try placing it inside the nostril. In Melbourne in 1971 Skoog's upper flap was shown disappearing

back into the nostril, but Randall admits “welshing” on his part of the deal.

Also in Skoog’s 1971 design he emphasized sliding the attenuated orbicularis muscle of the cleft edge under the medial edge and, in addition, acknowledged his use of my “white roll” flap at the mucocutaneous junction.

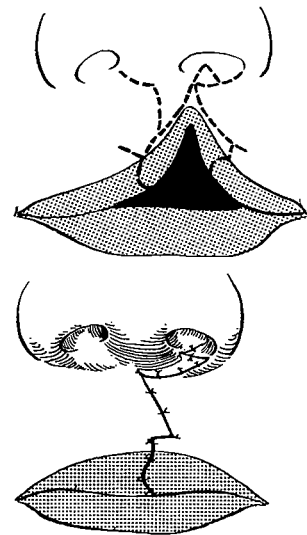
Yet, in spite of all the minor variations, it seems that Skoog’s 1971 unilateral lip method has become finally a slightly refined Randall design, 1958 vintage.



M E Y E R

In 1966 Rudolf Meyer of Lausanne, who can maneuver skis down the highest alp with the greatest of ease, evidently had more difficulty getting adequate rotation and repropose a modification of the double flap that Skoog originally designed. He presented this approach at Schuchardt’s Second Cleft Palate Symposium in Hamburg, stating that he had the same experience as Trauner with my method. He added:

We need an additional break of the suture line on the level of the vermillion border in order to get this ridge more prominent. So we add a very small LeMesurier quadrilateral flap.



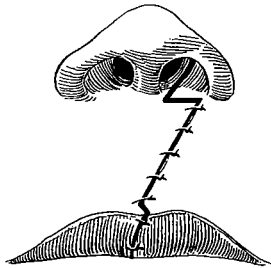
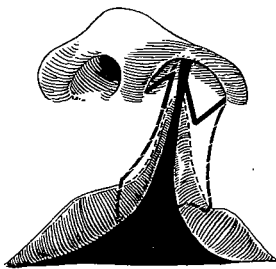
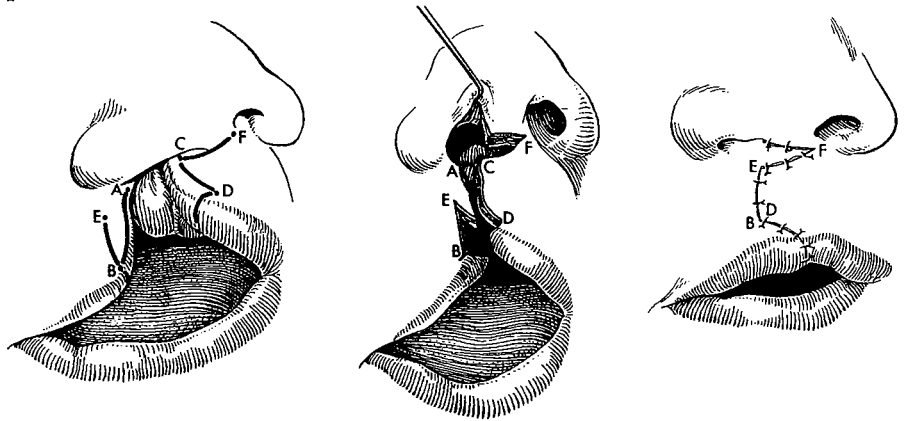
W Y N N

Sidney Wynn of Milwaukee, whom I personally saw become a 10-second man in the 100 during a Peruvian earthquake, did some quick lip flap shifting in 1960 when he abolished the LeMesurier portion of Trauner’s design and the Tennison portion



Sidney Wynn

of Skoog's design. He actually did a type of rotation with his advancement being a vertical flap transposed horizontally as already used by Trauner and also described by both Skoog and me in 1958. Actually, this could be said to be a reversed Giraldes. The 90-degree transposition creates an unnatural kink which lacks the natural flow of advancement as the gaping cleft is narrowed simultaneously. The Wynn design has limitations, and the results, although good in certain cases, fall short of the possibilities.



KAWRAKIROV

Bulgarian Von W. Kawrakirov in 1964 described a lateral vertical triangular flap based upon the inside of the alar base to be transposed transversely into a releasing incision behind the columella in spirit similar to Trauner, Marcks and Skoog. He closed the rest of the lip in a straight line with results that did not seem better than others.

MUSTARDÉ

Jack Mustardé, a jolly fellow, an innovator and an honest bandit who could have drawn a bow in Robin Hood's band, was once an ophthalmic surgeon in Nottingham, not far from Sherwood Forest. Enticed into plastic surgery by Gillies and later trained by him and Kilner, he finally became a consultant in Glasgow where his early experience in eye work shot him off like a rocket into orbit. As he is indeed a shrewd chap, few have ever caught him short. This little section may do so, and then there was another time . . .



Jack Mustardé

Mustardé had constantly commented on the beauty of tree and bush reflections on the water surface of a painting by Sir Harold Gillies of an old mill with its stream and weir. He was finally presented with the painting and promptly stored it in a drawer until time and finances would allow its elegant framing.

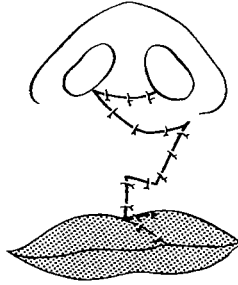
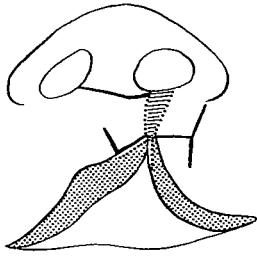
About a year later he invited Gillies to his home for dinner and, suddenly remembering the painting, scurried off to the local antique shop, bought a frame and hung it in an important position in his home. Gillies came along, spotted the painting and requested: "Musty, do you mind terribly if I borrow this rather nice painting for my exhibition in London?" Mustardé, of course, agreed and in due course went to London to see the exhibition in Foyle's Gallery. He bought a program and eventually came upon his painting, which was tagged with a small red dot in the bottom right-hand corner. Assuming this mark to indicate "privately owned," he questioned one of the ladies in attendance to find it actually meant "sold" and in fact had been purchased that very afternoon by Lord Harmsworth. He never even got a refund on his frame.

Mustardé and I have been friends since our early days with Gillies and evidently because of his loyalty to me and to LeMesurier through Matthews, the author of the cleft section of his book, *Plastic Surgery in Infancy and Childhood*, he felt a compulsion to combine us. These are his words in 1971:

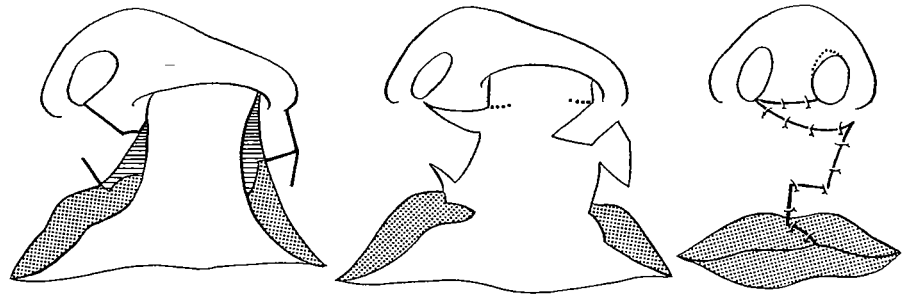
with friends
like this
who needs
enemies!

I for one have often felt that some sort of combination between a Millard operation and a LeMesurier would combine the best of both worlds. Other surgeons have obviously been thinking along similar lines and in 1969 Ciarpella and DeLongis, in Italy, reported a series of children with cleft lips in which they had used a technique combining a Millard operation with a LeMesurier quadrilateral flap.

Mustardé, pleased with the LeMesurier pout but disenchanted by the immediate lateral drift of the cleft ala, came up with a vertical flap from the lateral element to be transposed across the entire columella base and even into the opposite nostril in an attempt to *tie* in the delinquent ala once and for all. As he later discovered, Trauner had been thinking along this line 16 years before, as had Marcks and Wynn later. Mustardé's tie flap is



longer and his relaxing incision more extensive, but this does not seem to improve the principle. He adapted this approach to incomplete and complete clefts and has followed his cases for a year, reporting no drift of the ala. Yet, as the original LeMesurier lip "grew" too long on the lateral side in time, then the same criticism should apply here. Regardless of lip length, the nightmare of crisscrossing scars is unacceptable even if they all heal perfectly, and this outcome is not invariably assured even in Glasgow.

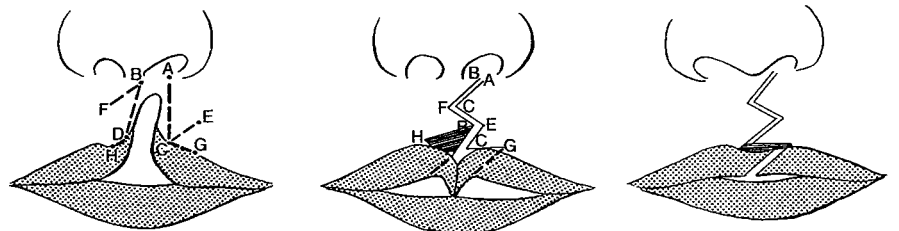


TALAAAT

Samir Talaat, from Cairo University, presented a Z-plasty modification in Rome in 1967 which he described as

similar to the Millard procedure, differing only in that the line BF is not at the base of the columella but follows an oblique line in the philtrum.

There were other differences, but the results shown did not seem to warrant the changes.



Miguel Orticochea

ORTICOCHEA

Then there is an even more "far-out" design by Miguel Orticochea of Bogotá which "outflaps" Trauner, Skoog or Mustardé. He presented this approach at the Congress in Rome and further

complicated a complex problem. He gets off to a deceptive start:

The basic principle of cleft lip surgery is: once the normal structures of the medial lip side (Cupid's bow, affected philtral line and its hemi philtrum) have been properly repositioned, the lateral side is adapted to the new orientation and location of these structures. *Hence the lateral side acts as a satellite to, and instrument of, the medial lip side.*

Except for this satellite metaphor, many of us have been chanting this refrain for years. Orticochea continues by drawing a line AA' and indicates that as long as nothing crosses this line to affect the non-cleft side, "anything goes" on the other side. "Anything" includes "a Girdes sub-alar horizontal incision" plus a subcolumellar incision and a mid-medial horizontal incision. He concludes that these incisions plus a vertical splitting of the alar base afford the best alar rotation, enabling

the surgeon to bend and manipulate the ala with the same facility and ease that a South American farmer bends a divining rod when looking for underground water.

Finally, he continues,

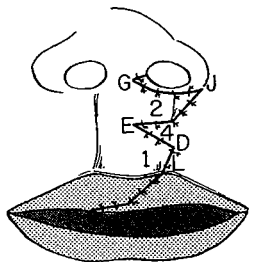
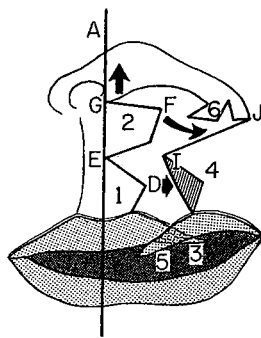
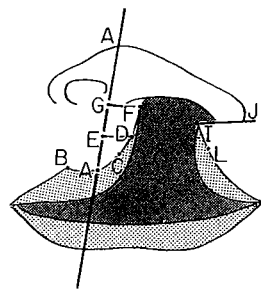
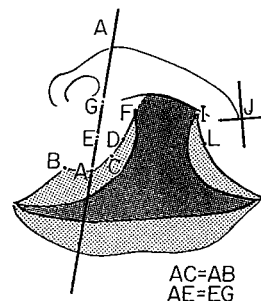
At the end of surgery the cutaneous lip suture forms a zig-zag and has four segments shaped like an M or a W on its side. This suture produces a less noticeable scar.

It is tempting to suggest that the unnatural quality of having one column of the philtrum look like an M or a W sitting on its rear, depending upon which side of the cleft it is viewed from, might displease a South American farmer even after he had found water! Although Orticochea mentioned a 10-year experience with cleft lip, his published results either still had sutures present or were only a few months postoperative without definite evidence of justification for such complicated maneuvers.

While visiting Miami in August 1971, he informed us that of all his contributions he was proudest of this lip method. Yet from the slides he showed of his palate procedure it was possible to judge, in part, the lip results in the periphery of the pictures, and there did not seem to be sufficient justification for such radical lip surgery.

O.K.
so far...

Oh, no!



This last example prompts the suggestion to us all that any surgeon obsessed to climb and cut his way to *identity* must make certain that he does not inadvertently over-scar his patients during the ascent.