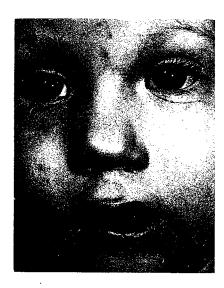
33. Final Acceptance, Adaptation and Dissemination

COMPLETE BREAKTHROUGH

BOB POOL, who had spearheaded the resistance in 1959, by 1970 had reviewed his cases of rotation-advancement and compared them with his cases of the Tennison type of triangular flap. At Colorado Springs he presented results like this one with a varying follow-up of four or five to six years.







He concluded:

The results from the rotation-advancement were more pleasing functionally and cosmetically due to a more symmetric cupid's bow, a smoother philtral ridge camouflage, better dynamic and adynamic muscle balance, and less tendency for the occurrence of a redundant flattened lateral lip with a thick vermilion border. Staggered line closures in the lower third of the lip have produced flattening of the cupid's bow even when the primary measurements were precise and accurate. This unfortunately was not predictable

of the operation, what you see is what you get!"

and could not be quantified. With the rotation-advancement repair this series suggested that the operative posture was an excellent guide to the five year appearance of the lip. Finally, the tip of the advanced lateral flap must not be utilized as structural support from lateral to medial lip. Instead this must form the fullness where the philtrum meets with the columella, and for that reason solid deep muscle support is the cardinal point in obtaining the camouflage of the philtrum.

Finally, in June 1971 Pool wrote:

There is a large misconception in reference to the complete cleft lip. Everyone makes a great point of the width of the cleft and I may have been guilty of this error in the past myself. This is not the critical point, as you well know; rather it is the vertical height that gives greater problem than the width of the cleft. The rotation-advancement repair, in my opinion, is without a doubt the dominant method used by practicing plastic surgeons. Thus I believe that we should *stop all this intellectual bloodshed about the other methods* and go to the panel discussion of refinements in the rotation and advancement as well as the errors made by the inexperienced in this particular repair.

Another advocate of the rotation-advancement principle in all clefts is steadfast David O. Maisels of Liverpool, who was trained by Osborne, a student of Kilner, and in 1965 spent a year with me in Miami as an R. W. Johnson Fellow. He had the opportunity to see both sides of the lip picture and wrote, in his 1966 Kay-Kilner Prize winning paper, a comparison:

At the end of the scale we have the Kilner/Rose/Thompson type operation which often results in a lip which is too tight, especially after secondary repairs necessitating the sacrifice of tissue to obtain adequate length. This tightness, particularly in the lower third of the lip, produces an excessive moulding effect on the alveolar segments and contributes to collapse. The nasal deformity being uncorrected at the primary operation, subsequent development of the nose is faulty and secondary correction is frequently extremely difficult. . . . At the other end of the scale are the modern operations, the best of which is undoubtedly that devised by Millard, which not only preserves the natural landmarks of the lip and restores them to their normal position, but also corrects the nasal deformity to a very marked degree. This allows the subsequent growth and development of the nose to proceed normally and should render superfluous all but the most minimal of secondary corrections of the nose. By placing the tension high in the lip it has been noted that the Millard operation has a more favorable effect upon the arch alignment (Joss 1964).



David Maisels

He repeated one aspect:

Since it is believed that adoption of the Millard technique for unilateral clefts will eliminate the need for secondary procedures of any magnitude no further discussion on their timing is called for.

Furthermore, Maisels has deigned to extend the rotation-advancement principle beyond lip clefts. As he wrote:

A similar technique is applicable to a number of other situations, principally those in which there is a triangular shaped defect with one base bordering upon a free margin.

Thus he and Nabgy Saad in 1969 applied the principle to the repair of alar margin notches, and Saad and Maisels in 1972 reapplied it to defects of the lip and eyelids.

A TEACHER'S APPROVAL

Bill Holdsworth, trained by Gillies and McIndoe, was one of my cleft lip and palate instructors in England in 1948–1949. He is Australian, born with a yearning for the sea, and whenever absent from Rooksdown House usually could be found as a ship's doctor on a voyage to the New World or "down under." He has large steady hands and as a hobby he constructed toy ships in narrow-necked bottles—two- and three-masted schooners no less, and rigged in full sail. As it is seldom that a teacher acknowledges the work of a pupil, I quote with special pride Holdsworth's 1970 edition of *Cleft Lip and Palate*:

There is advantage in a plan which can be varied during its execution. To cut exactly on a drawn line is not easy. The skin yields to pressure from the knife, and stretches if pressed or pulled. However accurate the design, angles open less, or more, than expected, and edges to be sutured together are found to be unequal. In such contingencies the only hope of a symmetrical lip is to be able to redesign the opposing flap. The Millard operation is the only one in which this can be done easily. With it the surgeon is not tied to his design, and the plan is never his master.

Holdsworth cited other reasons for choosing this method:



penility

Economy



William Holdsworth

what goes up in R.A. should come

- 1. Little tissue is discarded. Only the cleft edge is thrown away, and there is no removal of skin from the upper part of the lip to bring about eversion. The natural bow is preserved and can be placed easily in the centre of the lip.
- 2. Full eversion results from preservation of the border, often in its entirety, and from tightness in the upper lip, where the defect beneath the columella is closed by advancement of the lateral part of the lip.
- 3. The line of muscle closure is not over the cleft, but more medially, in front of the premaxilla, which provides a better seal than sewn mucosa.
- 4. Skin can be spared for increasing the deficient side of the columella adjoining the cleft. This makes equalization of the nostrils possible.
- 5. The outstanding advantage is in the location of scars. These are longer than with other methods, but those beneath the nostril become unnoticeable, and the long vertical scar imitates the absent pillar of the philtrum. There is no other operation which leaves the lateral plane of the lip unmarked, and in the absence of a line running down from the nostril a major stigma of cleft is taken away.

Holdsworth also confirmed a point I have made numerous times, namely, that there is spontaneous correction of contracture if the procedure has been executed correctly.

With single clefts, parents are warned about contraction in the scar, since with healing the operated side of the lip may be pulled out of shape. The Millard operation, with its long scar-line, curved and unbroken, is more prone to this disturbance than most. Providing healing is uneventful, and mucosa has been well wrapped around the back of the lip to seal the muscle union, tightening of the scar will not cause permanent deformity, and resolution can be awaited with confidence. Softening of the lip continues for years, and straightening may take as long. This applies only of course if the operative procedure was performed correctly and the medial element let down fully.

He presented a case that five months postoperatively still showed some contracture but after four years showed perfect symmetry.

SOME EXPRESS NO RESERVATIONS

During the March 1970 Cleft Lip and Palate Symposium in Miami I baited Professor Stefan Demjen, previously of Bratislava, Czechoslovakia, then of Iowa City, but now again at Comenius University in Bratislava, as chief:

Ever since Clifford, Pool and Musgrave started the idea that the rotationadvancement method is unsuitable for complete clefts, many have been hesitant, even afraid to try it.

Demjen, an adroit technician with vast experience, gave an answer that was pertinent:

Yes, it has almost become a *superstition*. I don't know why as I have never found any difficulty with it in complete clefts. It is not how long you make it, it is how you make it long—but the rotation 'back-cut' is important.



Stefan Demjen

In Colorado Springs in 1970, as Pool was giving an erudite evaluation of the rotation-advancement method in all types of clefts which he substantiated with excellent lip results, Georgiade in the back of the lecture hall whispered:

I don't know why there is so much discussion. I've never seen a cleft yet in which I couldn't do a rotation-advancement.

This flat-footed statement by such a light-footed tennis player stimulated my extraction of a summer of 1971 invitation to Duke University. It was a visit long overdue for me as I had been anxious for years to see with my own eyes the North Carolina unit which Ken Pickerell pioneered into one of the strongest and most productive plastic surgical teaching centers in the world. I had an opportunity to observe Nick Georgiade do a two-layer Campbell alveolar cleft closure and a rotationadvancement procedure on an incomplete cleft lip. His surgical ability during the entire procedure was impressive. I was invited to do a wide complete cleft which caused me a little more than the usual difficulty but which seemed to turn out pretty well. Then I stood over senior resident L. McCraw while he rotated and advanced a complete cleft with both skill and poise. To my great pleasure but much as expected, Nick had backed what he claimed and "in spades."

A YOUNG TURK



Guler Gursu

A worthy proponent of rotation-advancement in the Middle East has been Guler Gursu of Turkey. She works in Ankara, once the land of the Hittites but now a typical college town. It was somewhat disillusioning to discover that since 1923 the fez, veil and harem have been banished legally from this exotic country. In the same spirit of progress, some of Turkey's more enterprising doctors travel to foreign hospitals to study.

"GiGi," as she has become known in the States, became a resident under Barsky, Simon and Kahn at Mt. Sinai Hospital in New York, where unilateral clefts were getting the LeMesurier and Tennison treatment. Then, at a cleft palate meeting in Washington, D.C., in her usual forthright style, she asked me a leading question on lip in the hotel coffee shop and received several sketches on a paper napkin. Upon return to Mt. Sinai, she solicited the cooperation of senior resident Saul Hoffman, and together they did their first rotation-advancement operation in "silencio." Later in 1961 Gursu accompanied our plastic team to Jamaica on a "cleft" trip and spent several weeks in our unit at the University of Miami. Then she returned to Turkey and by 1965 had become associate professor and chief of plastic surgery at the modern university in Ankara, Hacettepe Medical School. This is an abstract of her fight for plastic surgery:

There was no chair for me. I do not mean academic, I mean even a chair literally to sit on, no instruments, no residents, no program and no patients!

This girl, with flashing dark eyes behind glasses and true Turkish tenacity, scimitared her way inch by inch until in 1967 she had developed a respectable plastic surgery service. Then, at the Rome International Congress, she noted the extensions in rotation-advancement, as she wrote in 1973:

I had been able to close every wide cleft before the circumalar incision extension but after 1967 that little trick made it much easier for me and gave better results for the patients.







Over the past seven years she has rotated and advanced 175 times, and, as she says,

Rotation-advancement is easy to perform, does not require complicated measurements and it is very simple to teach. It usually takes me no more than one or two cases with each resident helping him mark the anatomical points and plan the basic rotation of flap A with its "back-cut," advancement of flap B with its extended alar incision and use of flap c. Then they have to learn to fiddle around in their own way with the final millimeters.

Her first resident, Onur Erol of Istanbul, who found this method easy to learn and teach, is at present working on an in-depth study of 563 clefts seen at Hacettepe University from 1957 to 1971.

FINLAND

From the Finnish Red Cross Hospital for Plastic Surgery in Helsinki, where 99 percent of clefts of this country are treated, V. Ritsila, S. Alhopuro, R. Ranta and A. Rintala reported in 1973:

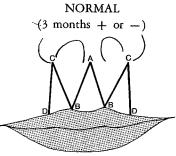
The surgical procedure has included our routine method of modified Veau's anterior palatoplasty with mucoperiosteal flaps to the nasal lining and repair of the lip with Millard's rotation-advancement technique.





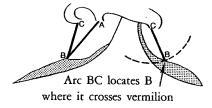
George Scrimshaw

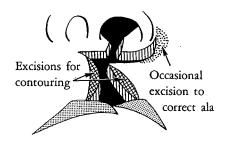
the talies are mine



AB = BC and usually = CD

interesting step in measuring





ADAPTABILITY

Gerald O'Connor pointed out the unpretentious, clairvoyant George Scrimshaw, chief plastic surgeon of the Kaiser group of hospitals, as having "one of the best lip and nose repairs in the Bay area." I wrote Scrimshaw, of Oakland, California, for detail. He responded with sketches and expounded with specifics:

I have used the rotation-advancement technique for all clefts in the past ten years. It has been, for me, satisfactory in all cases, and I prefer it to any other present operation for lip repair. Everyone modifies each technique as he uses it, and I found early that I could work out my results better with certain changes. Some of these were presented in one of your later papers and I was pleased that my changes were in the same direction. . . .

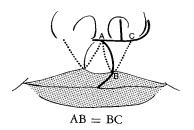
In unilateral clefts, I have found specific measurements to be a very dependable guide during surgery. Most of my patients are approximately 3 months of age at operation. At this time the distance from the midpoint of the columella base to the normal peak of Cupid's bow (AB) is between 9 and 11 mm., usually 10 mm. This is also the distance from the normal alar base to the Cupid's bow peak (CB). Usually the distance from the alar base to the lip vermilion directly below it (CD) is also 10 mm. Thus AB = CB = CD. In measuring the cleft side, I measure from the alar base and describe an arc 10 mm. in radius. Where it intersects the skinvermilion border is the proposed peak of Cupid's bow for the lateral segment.

From the normal Cupid's bow peak, I measure 2 mm. toward the cleft to obtain the center of the Cupid's bow and 2 mm. again for the proposed peak on the cleft side. Incisions are made along the vermilion base as you described but my skin incision passes very little beyond the base of the columella. However I free deeply by cutting the muscle and deeper tissue subcutaneously as far as necessary to allow the prolabium to flap loosely into position without pull or tension forcing it. It is often necessary to carry the mucosal incision across the frenulum for adequate relaxation but this does not appear to disturb healing or the function of the frenulum after healing.

Once the peak of the bow on both medial and lateral elements is easily located 10 mm. from the indicated points, I contour the adjoining sides into a gentle curve concave toward the midline simulating the philtrum ridge trimming mostly skin and dermis and leaving muscle for bulk. The lateral wedge flap advanced medially must be sutured muscle to muscle.

If the nostril floor is in excess, a triangle is removed but if a complete

cleft is being repaired, the floor is made of tissue taken from the lower medial area of the nostril rotated upward to meet the tissue from the lower lateral nostril area. To free the lateral nostril base adequately, an incision is made directly into the nostril below the alar base creating a flap which when elevated would advance medially bringing the alar cartilage with it. I have tried Skoog's method of suturing the alar to the upper lateral cartilage, but these structures are very thin and my needles and scissors do not appear fine enough to do this without tearing. I have tried the small "white line" flap but have not had much success with it. I occasionally left excess vermilion at the line of closure hoping to use it later for central tubercle bulk anticipating some thinning with growth. I have almost stopped doing this because of the limited number of cases in which it was valuable.











He added a P.S.

Most of my local colleagues tell me that after a rotation-advancement closure, the lip shortens but later lengthens again. . . . I have *not* found this in my cases . . . the length remains the *same* as set at operation. I suspect they do not adequately free the prolabium and *pull* it *down* so it retracts upward again later. Those I have seen do not "come down" again. In my own cases there has been no problem.

Some don't.

Oscar Asensio del Valle

A RADICAL CLEFT EDGE EXCISION

Nestled in the ancient, cobblestoned village of Antigua in the interior of Guatemala and almost in the shadow of a volcano is the unique and immaculate Centro Infantil Estomotologia of Oscar E. Asensio del Valle, an oral and maxillofacial surgeon of the University of San Carlos. Here in 1970 the proud and practical Asensio, who does about 150 cleft operations a year, presented fine examples of his modification of the Mirault-Blair method, demonstrated a case under local anesthesia with skillful precision and then allowed me to rotate and advance a couple of difficult complete clefts.

Two years later he sent me a reprint of an article published in a 1971 Venezuelan odontological journal diagraming his modification of the rotation-advancement method.

I was pleased to see his back-cut on the rotation, interested in his reversion to the old use of flap c with little or no aid to the columella and happy with his advancement of the alar base across the cleft to achieve a round nostril. His only true modification, however, is an exaggeration of my "concavity making" of the lateral cleft edge. Asensio actually excises a very large "Thompson-type" angle-shaped full-thickness piece of good tissue (9–10–11) to facilitate (temporarily) lateral edge lengthening without lateral paring. Incidentally, he is throwing away quite a bit of usable tissue on the non-cleft side also. The double sacrifice of unexpendable tissue in clefts already deficient must magnify the discrepancy. In spite of this discard of principle, Asensio sent me some interesting early postoperative results.





Cutting the advancement flap into a long, narrow rectangle produces an unnatural scar line in a more visible position.





In my opinion, the closer Asensio holds to the refined standard rotation-advancement method, the better his results.









The longest result he sent was six months postoperative and encouraging.

The plastic surgery division of Stanford University has appointed Asensio to its teaching staff and rotates residents through his hospital, where there is an abundance of clefts. Donald Laub for Asensio at the Waldorf-Astoria Hotel in New York, June 1973, presented to the American Association of Plastic Surgeons this modification of lengthening the lateral side to save mucosal paring in wide clefts. He projected slides of these same cases.

Musgrave, spotting the narrow advancement flap actually crossing the normal philtrum column, rose and approached the microphone:

I have been one of Millard's severest critics so it is only fair that I question Asensio. It is predictable that his lips will increase in vertical length as the LeMesurier method did. In fact, from the photographs, the A-P, not the under view, I can see the lips are already long.

This was like having Larry Little, Dolphin A.F.C. offensive lineman of the year, leading the interference. It gave me a chance to score around end against Asensio's temporarily expedient excessive wedge resection of lip from the deficient side. In fact, Randall asked Asensio, "Where did the muscle go?"

My comments were confined to principles:

Although this modification by title is designed for wide clefts, actually what is important is not how wide the cleft but how short the vertical length of the lateral edge. It is true Asensio can lengthen the lateral edge as Rose and Thompson did but again it is at the expense of mid lip side-to-side shortening and this is too great a sacrifice. Anyway, keeping the bow peak to commissure distance equal offers no real problem and there are better ways of achieving lateral cleft edge length than throwing away good lip.

In the face of this attack the poised Asensio responded in Spanish, which was translated adroitly by Mark Gorney:

I do not take away as much tissue as it seems in these drawings.

Then, of course, he comes into line with the refined rotation-advancement, which also *concaves* the lateral cleft edge.

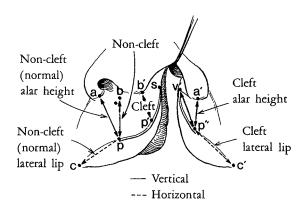
Donald Laub's comment following my "voice of polite dissent" in *Plastic and Reconstructive Surgery* in 1974 gives strength of *length* to my stand:

Recently we have noticed three patients repaired by the Asensio technique as infants, followed-up for more than one year. They seem to have a long lip on the cleft side . . .

In fact, Laub and Kaplan of Stanford Medical Center have survived the Asensio "rapids," at least rotation-advancementwise, and after 182 Asensios and 100 true rotation-advancements have, as they say, made "the full circle" return to the rotation-advancement. They support my present modifications which are the natural process of evolution of this principle. These include lip

measurements using the commisures and labial muscle reconstruction, both of which I presented at the 1973 Cleft Palate Symposium at Duke University, as well as concave shape of the advancement flap and frequent need for a back-cut on the rotation, both of which I presented at the Rome Congress in 1967 and published in my 1968 "Extensions."

In September 1974 Ernest Kaplan sent these diagrams of the rotation-advancement method with explanations. His quotes will be followed by my comments.



He made the point:

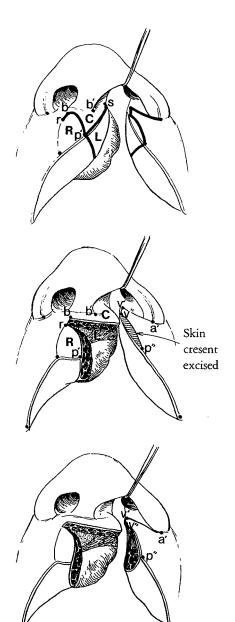
I have not been using the C-flap for columella reconstruction. I believe I achieve equivalent lengthening because of the nearly straight line of the rotation, thus the C-flap is greater in vertical direction when it is transposed.

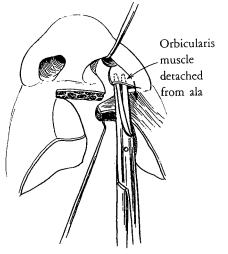
Answer: Not really. I have been through all of this years ago as it is merely returning to my original use of c flap as nostril sill which simply does not achieve as fine shaping and lengthening of the columella.

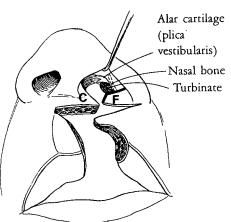
He noted:

I also have found that it is necessary to release the C-flap from the septum to allow it to 'ride up' into a more superior position.

Answer: Yes, this was also published in 1967 and 1968—but with far more release than shown by Kaplan. As a matter of fact, this is a partial contradiction to his claim of not using c for the columella.







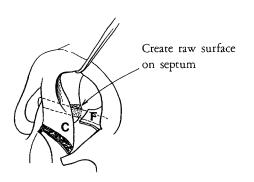
He mentioned:

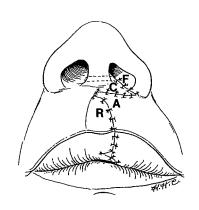
Also, the wider quadrilateral advancement flap adds height under the columella and this also increases the vertical height. Have you tried this?

Answer: This long, skinny quadrilateral flap is a holdover from Asensio and does not give the natural philtrum line. Of course, the back-cut necessitates snipping off the very tip end of the advancement flap for a perfect fit. Then by switching the tail of flap c back into the back-cut to shape the cleft side hemicolumn and lengthen this part of the columella, the quadrilateral defect is kept to an artistic minimum.

There is also Kaplan's holdover of Asensio's alar base (F) flap being sutured to a raw area on the septum. This was being used in Korea in 1954 (page 232) but the new methods of handling the alar base, as shown in this book, should be much more effective.

The basic problem with Kaplan's entire rendition, as seen in his diagrams, is that the rotation incision does *not* ascend high enough to the columella base (his b') on the cleft side. This cuts flap c *too large*, placing the rotation gap and subsequent scars too low in the lip, thus forcing Kaplan's compensations.





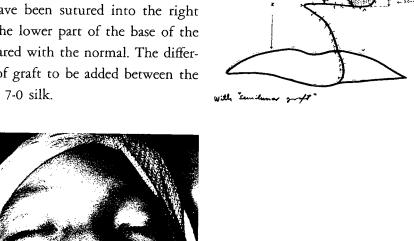
AURICULAR ADJUNCT

Cesar "Valentino" Arrunategui of Trujillo, Peru, consultant at the Barsky Unit in Saigon, presented before the Vietnamese Society of Plastic Surgery in October 1972 a paper entitled "The Addition of Tissue in the Unilateral Cleft Lip Repair Associated with the Millard Technique." This is of special interest for two reasons. Arrunategui studied under Tord Skoog in Uppsala for nine months in 1969 but uses the rotation-advancement lip principle. Convinced of its value in all cases, he has proposed a sound adjunct for very wide clefts when he feels there is a vertical deficiency of tissue in the lateral flap when measured from the alar base to the vermilion border. After the rotation-advancement (and other methods also) he finds, as do other surgeons in the unit, that the ala ends up

lower than normal with its inner part rotated downward and medially giving a wide structure to the inferior part of the ala.

He favors a wedge of whole-thickness skin graft taken from the auricular lobule, semilunar in shape and not more than 3 to 4 mm. wide. As he explained to me in 1972:

When the rotation-advancement flaps have been sutured into the right position, measurements are taken from the lower part of the base of the ala to the mucocutaneous line and compared with the normal. The difference will give the approximate amount of graft to be added between the ala and lateral flap. It is sutured in with 7-0 silk.







In my experience the lateral flap has very rarely been so inadequate that it cannot be made to carry its own. Lateral paring more than a few millimeters beyond the normal limit is taboo. Yet there is another way out of this difficulty. The upper hori-

zontal incision can be made higher, cutting through several millimeters of alar base which is left on the upper part of the lateral flap. This increases vertical lip length with no serious consequences to the more than adequate alar base length.

The addition of an ear graft is another approach which is to be commended because the surgeon has put *first things first* and *not forsaken a vital fundamental principle* because of a local correctable deficiency.

TEACHABLE

A meticulous, fastidious and artistic surgeon with a hi-fi personality and a sense of drama is Mark Gorney of San Francisco. He wrote a glowing report upon his return from two and a half months in Vietnam with the Children's Medical International:

It has certainly been one of the most fantastic experiences of my life. It is of some interest to you in that we were doing on the average of four to six clefts a day and when I left there was still a backlog of 52 that I had not been able to schedule. Although Wynn and Randall had preceded me, you will be happy to know that ALL lips are being closed by the rotation-advancement technique. On one day I took on four cleft lips and did each one by a different method and one month later we compared results; there was just no question in the trainees' minds which gave the best results, and above all, why. In the past 10 months the three trainees have done over 400 cleft lips between them.

LEAVES HIS MARK

A year later Mark Gorney returned to Vietnam. His report examplifies the reward a teacher enjoys when he has planted seed in fertile soil.

In the waning moments of my second Vietnamese journey I stood quietly behind our senior trainee while he laboriously took our west junior trainee through his first rotation-advancement. I was amused to hear him using the same aphorisms I had taught him the year before. At the end of $1\frac{1}{2}$ hours the doctor doing his first lip had done an admirable job. Suddenly all the frustration and all the shoveling against the tide dissolved into a very warm feeling of satisfaction.

TEACHING THE RESIDENTS

On my plastic surgery service at the University of Miami, the residents scrub with me on a number of cleft lips before they do their first one under supervision. They are expected to understand the theory completely before undertaking the "practice." With that preparation they not only enjoy the operation but achieve superior results, as seen in this patient operated on under supervision in 1971 by senior, senior resident John Devine and reviewed one year later.



FROM ISLAND TO ISLAND

Victor Hay-Roe of Honolulu, formerly an ardent surgical resident in Pittsburgh, does a nice rotation-advancement even on the most difficult of complete clefts in which the discrepancy in the height of the two bows on the medial element was horrendous. In fact, it was well over half the vertical length of the lip, possibly two-thirds!



Victor Hay-Roe







He did not quite agree with his former chief Musgrave's earlier feeling as to the difficulty of teaching the method. His story is a fascinating adventure in paradise. It takes place on the Polynesian island of Western Samoa where 130,000 natives live in thatched, stilted *fales*. The only trained surgeon is an American-educated Belgian named Walter Vermeulen, who completed four years of general surgical residency at Queen's Medical Center in Honolulu in 1968.

Hay-Roe showed me a photograph of Vermeulen's first case and told me,

It was after Walter's first attempt at lip repair using the description of a Mirault-Brown-McDowell as supplied in Christopher's *Textbook of Surgery* that he wrote to me asking me to come down to help him with some of his more difficult plastic cases.

Hay-Roe sailed over to Samoa, assisted Vermeulen to do one rotation-advancement and left a set of my reprints with him. After an interval of one year from his first case, he sent Hay-Roe an encouraging record of his unaided use of the rotation-advancement method. It was probably an easier case, and there are still discrepancies but even so . . .

KUALA LUMPUR

V. Sivaloganathan of the University of Malaya, Kuala Lumpur, in 1972 reported on 86 cleft lip cases treated over a 20-month period, covering briefly all aspects from incidence to assessment. Surgery was reported without fanfare:

Millard's rotation-advancement technique, with some modifications, was used in all the patients. . . . The overall results of management have been satisfactory to the surgeon. The parents have been pleased and relieved. Teenaged and adult patients showed immediate psychological improvement.

EVEN UNTO KATMANDU

Edward Lamont of Hollywood, California, and the University of California, Irvine, wrote of his 1971 visit to Shanta Bawen







Edward Lamont

Hospital in Katmandu, Nepal. Huddled in one corner of the main ward, which was filled with Nepalese with odd diseases and the usual number of lepers, was a beggar woman in her late teens with a boy of four and a six-month-old baby with a wide unilateral cleft. She had walked with her little boy from the foot of Mt. Everest for seven days and seven nights with the baby on her back.

This was only 15 years since the first Westerners had been allowed into the country. As no lip or palate clefts had been treated except by someone merely sewing the edges together, Lamont had been invited by G. Mack to start a cleft lip clinic with a demonstration of a lip procedure that could be used for all forthcoming clefts. Lamont recalls:

I was given a fleece lined scrub suit and advised it would be quite welcome when the temperature dropped to 50 below zero. General endotracheal anesthesia was given competently by a Nepalese doctor trained in England. It was my decision to employ the Millard cleft lip operation for my Nepal heritage because for someone who is not a plastic surgeon, less can go wrong. One approximates one wall to another and gains length by creating interdigitating flaps in a relatively cosmetically silent area. With just two or three opportunities to present the lip operation I was concerned that any procedure presenting triangular flaps on the lower portion of the lip might lead to confusion.

I have long been a devotee of carefully measuring the non-affected side, from the base of the nose to the tip of the vermilion (in the three to four month old baby in the States it approximates 12 to 13 mm.). Because I had no calipers, in this case I measured the distance with a cotton applicator stick. Then I marked off the triangle in the lateral lip at the alar base, and the incision below the columella, and again measured these with applicator sticks bent to form with greenstick fractures and cut off at these dimensions to serve as a pattern for this first operation and for all future procedures. The rotation-advancement operation was accomplished uneventfully.

When the baby was returned to his bed, it was found that the tiny mother had climbed up into the crib with her fouryear-old son. She received and cuddled the postoperative infant, but as soon as the sutures were removed the three set forth on the long trek back to their Himalayan lair.



Only weeks later, Lamont received news that Dr. Mack and his assistants had continued to operate on a number of clefts, including that of the Secretary of State's son!

Just when it seemed that general application of the rotation-advancement principle in all types of clefts was being accepted, M. Lomas-Fuentes of Mexico City, at the Sixth International Congress in Paris, August 1975, presented this conclusion from his experience.

Dr. Millard's technic is best for repair of the complete, wide cleft and Dr. Tennison's repair is useful for closure of the incomplete one.

At first I was undecided whether to laugh, scream or just ascend 36 floors and jump off the top of the Congress Hotel Concorde-Lafayette! As a compromise Lomas-Fuentes is referred to in Chapters 24, 27 and 29.