

# *V. Incomplete Clefts*

## 24. *Early Acceptance in Incomplete Clefts*

OFTEN it has been said, "An incomplete cleft can be more difficult than a complete one." Yet, with less tissue missing, less nasal distortion and a better maxillary platform, this need not be the case. If efficiently designed, the end product should approach normalcy. The rotation-advancement method received almost immediate acceptance in incomplete clefts. First, it not only exceeded the accomplishments of the other methods but did so with greater economy of tissue. It was the only method that, rather than excise, utilized Simonart's band when there were mesenchymal elements present. Second, the early diagrams, and particularly the drawings of Freret, were an excellent guide to how to handle incomplete clefts and were partly responsible for the early acceptance. Several surgeons expressed their preference for the rotation-advancement in incomplete clefts.

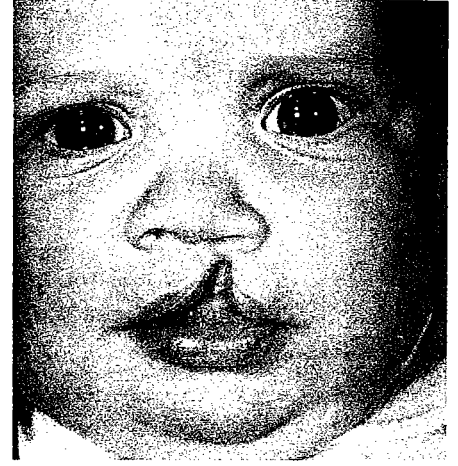
Clifford and Pool started a precedent:

If it is necessary to combine the length of the Z-plasty with lengthening of one side of the central limb, this can be done by eccentric lengthening of one of the flaps of the Z. This modification of the Z-plasty is the basis for repair as outlined by Dr. Millard and is most useful in incomplete clefts, since the vermillion of full thickness on the two sides is usually at a different level.

Consistent with his prediction on incomplete clefts, Robert Pool has continued his use of the rotation advancement as



exemplified by the lovely case he forwarded in 1974.



Ross Musgrave

*and they  
wisely  
elected him  
their president  
in 1964.*

Ross Musgrave from the University of Pittsburgh, in a presentation to the American Cleft Palate Association in 1962, gave his opinions:

In an attempt to save as much of the cupid's bow as possible, various procedures to introduce lateral tissue into the deficient medial portion of the lip have been designed. For example, the insertion of the major portion of this tissue into the area just below the columella has been well demonstrated by Millard. This produces a tightening of the lip in the upper portion, and some fullness of the lip at the mucocutaneous junction, especially in the incomplete clefts.

In our experience the Millard procedure is particularly recommended for those clefts which are somewhat more severe than the notching or grooving and yet somewhat less than the wide complete cleft lip. This operation produces a nicely camouflaged scar. It elevates the floor of the nostril and it rearranges the columella base particularly on the cleft side. For those infants who have a full lip with a well demarcated mucocutaneous ridge and for whom the cleft is not quite complete, one can produce with this method a most satisfying and aesthetically correct result.

Musgrave repeated these feelings in 1964 for Converse and told me on the side:

The rotation-advancement gets the most whistles from the nurses at the end of the operation.

Clayton DeHaan, for Stark in 1968, joined Clifford, Pool and Musgrave:

The majority of incomplete clefts present much more complicated problems and call for a more sophisticated approach. Millard has a repair which we consider excellent for an incomplete cleft. A triangular flap is shifted from one lip margin to the other, but, in contrast to other techniques, the tissue is shifted at and below the nostril floor so that a minimal amount of lip tissue is discarded. Advancing the flap beneath the columella gives adequate length to the lip, and the wound is closed along a line closely simulating the normal philtral ridge. At the same time, the columellar base is rotated upward and the flaring ala nasi is drawn medially, thus creating a longer columella and a natural appearing nostril floor and sill. This repair, which has yielded excellent results, is relatively simple technically and does not rely on a set of predetermined points; any adjustments required in the length of the flap can be readily made. An additional advantage is that secondary repair can be accomplished by simple reduplication with extension of the original incisions.



*Clayton DeHaan*

Even some of my most worthy antagonists such as David Davies and Peter Randall, it has been rumored, prefer the rotation-advancement method for many of their incomplete clefts.

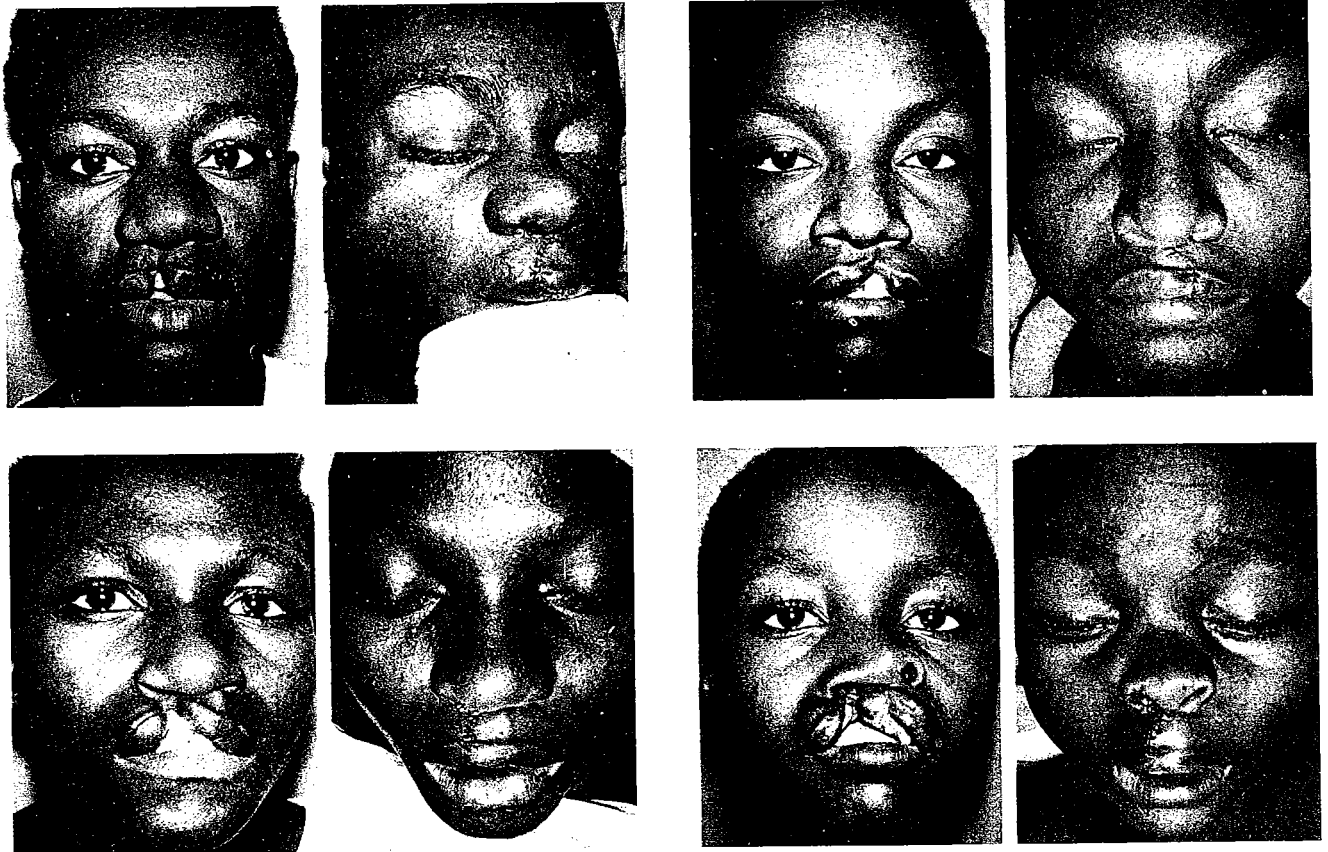
Residents do not seem to find the procedure difficult. Here is a cleft that was rotated and advanced by my first resident, Peter Stokley, in 1968 and his result as seen four years later.



#### THE EASIEST OF ALL

Probably the ideal general category for any cleft lip procedure is an incomplete cleft in the adult Negro with the more massive

musculature, voluminous vermilion, natural nasal flatness and racial columella shortness. Therefore, as most surgeons admit the rotation-advancement principle is easy in incomplete clefts, it is little wonder that I reveled in rotating and advancing, at 30 minutes apiece, the clefts pouring out of an inland valley on the island of Haiti.



Although these people were never seen again, there need be no concern. With such full-bodied labial structures and less haughty nasal aspirations, as they sat with their stitches at the end of the operation, so shall they be until the end of their time.

#### AN EXCEPTION

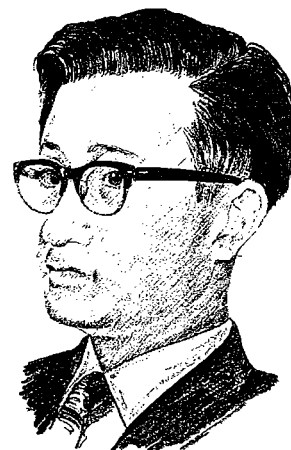


With general acceptance of the rotation-advancement procedure for incomplete clefts, there was a "foot in the door" and a temptation *not* "to look a gift horse in the mouth" but to claim all incomplete clefts for the R-A method. Yet, lest we run like stupid sheep into the slaughter pen, let us balk and reconsider.

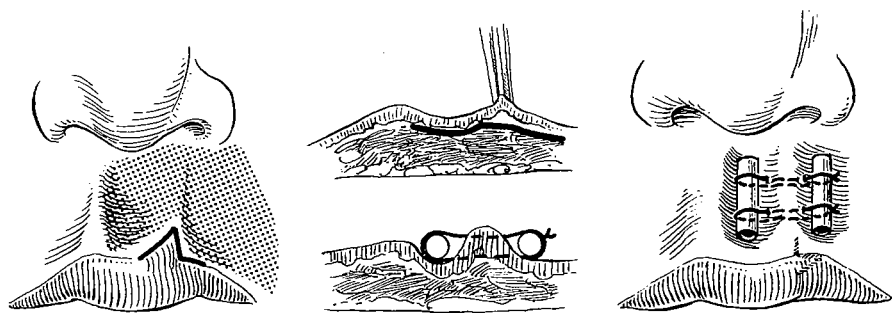
In the rare minimal cleft, where the displacement of normal structures is nil, a radical rotation and a complete advancement may be unnecessary. Any effort to avoid skin scarring must be considered carefully.

### THE MINI-MINI CLEFT

Takuya Onizuka of Tokyo, in Melbourne in 1971, suggested a conservative but intriguing method of handling the minimal cleft lip where a slightly wide nostril floor and a vermilion notching are the deformities noted. Here, except for a lack of philtrum column on the cleft side, the skin is intact and should be kept that way. Onizuka narrows the nostril floor with an excision and corrects the vermilion peak with a small Z-plasty. He then undermines the lip skin between these two areas and gathers it into an exaggerated roll like a philtrum column with mattress sutures.



*Takuya Onizuka*



As noted by Ohmori, the long-term results of this gathering will be of interest as there is a tendency for scars and rolls to flatten in time, particularly under continuous lateral pull of the lip muscles. Avoiding a skin scar in these small notches has always been a favorite hope of mine, but as yet I have not been able to correct all the other associated discrepancies without violating the skin. This indeed may prove to be the answer in certain very minor clefts.

It is important to end with this note: In all the clefts that I have treated since 1954, only two could be corrected without a skin incision. One was a vermilion notch with no other



deficiencies or distortions present. The other was a slight deficiency of the orbicularis oris muscle appearing as a vertical skin groove which was undermined from the floor of the nose and filled with a dermal graft.

Yet recently I treated a cleft lip which, although it required skin incisions, was correctable *without rotation*. The patient was a 35-year-old man who has a sister reported to have a similar microform, but there is no family history of the cleft anomaly in his family, including his own four children. His cupid's bow, both columns of the philtrum and the intervening dimple were in *normal position*. The skin groove lateral to the "cleft side" philtrum column required skin excision. The lateral lip muscle bulge was dissected and rotated down, and a medial muscle flap from the area of the vertical groove was transposed up into the rotation gap in the muscle. The interruption of the mucocutaneous "white roll" ridge was interdigitated. The free border mucosal deficiency was filled out with a posterior V-Y roll-down. The flaring ala and wide nostril floor were corrected by a circumalar incision, its medial advancement, denudation of the tip of this flap and suturing it to the septum at the nasal spine. The other nasal deformities required a rhinoplasty, submucous resection of the septal cartilage with a strut graft to the tip, alar cartilage reduction on the normal side and an onlay alar cartilage graft on the "cleft side." It is interesting to note the correction, which necessitated all other aspects of rotation-advancement with refinements, extensions and adjuncts, still *did not require rotation*. This is indeed a rare situation!