

32. Comparative Studies

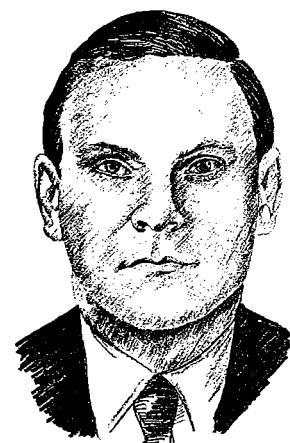
CANADIAN COMPARISONS

BRUCE WILLIAMS, at the Montreal Children's Hospital, even in his residency began using the rotation-advancement method. Surgeons had previously been using LeMesurier and Tennison. In 1968 he reported a "comparison of LeMesurier and Millard techniques." Two distances, a point from the nasal floor to the height of the cupid's bow (a), and to the commissure on the cleft side (b), were the important measurements in the assessment. He found that in incomplete clefts the rotation-advancement graded ahead of the LeMesurier. In complete clefts both ratings were lower than in incomplete clefts, and the rotation-advancement method graded insignificantly less than the LeMesurier. Williams, however, was using the rotation-advancement as originally described without either *refinements* or *extensions*, a fact which must nullify, at least in part, the results.

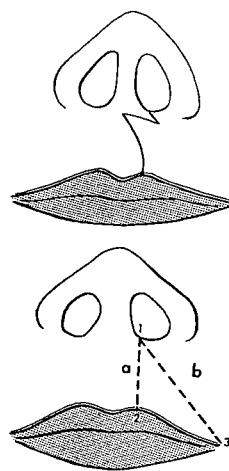
Williams' original study did cause me to focus more carefully on the commissure as a landmark, but for me the distance from the cupid's bow peak to the commissure (2 to 3) is the important guideline. With this additional adjunct and the aid of the *extensions*, the rotation-advancement method consistently checks out exceptionally well.

Remembering that Williams had previously been using the early rendition of rotation-advancement, I asked him recently about his present stand. This was his answer in January 1973:

The more recent modifications, that is, further curving of the upper medial incision and advancement of the small upper triangular flap into the columella, in conjunction with undermining and freeing of the alar carti-



Bruce Williams



Important!

If so then
this volume
will present
III and IV!



M. A. Dion

lages with suturing at the dome, have changed the original operation considerably. I would agree with Ross Musgrave that the operations should be listed as the Millard I and II. I usually reserve the latter operation for the wider clefts and in those where I have difficulty in rotating the alar cartilage into a good position. I use only a slightly modified Millard I procedure for incomplete clefts or for those with a narrow gap.

ANOTHER COMPARISON

M. A. Dion and J. Parenteau, also in 1968 and also in Montreal, stated:

The senior author has been fortunate to observe the late operative results of LeMesurier, Tennison and Millard methods of repair. Since June 1964, the Millard procedure, which has given outstanding results, has been used as the primary method at St. Justine Hospital, Montreal. . . . We prefer this method for the following reasons:

1. The distortion of the philtrum is minimal, particularly at its lower part where minor deformities are most noticeable.
2. The nostril on the cleft side can be narrowed and permanently fixed in a more normal position.
3. The columella is lengthened, thus correcting the most common deformity in the cleft lip patient. The base of the columella is lifted from the nasal spine and moved toward the cleft side. The techniques of LeMesurier and Tennison destroy the integrity of the lower third of the philtrum and often leave the nostril floor wide and distorted.
4. Because of its simplicity and versatility, this technique is adaptable to all cleft deformities.
5. Revision of cleft lip that was previously repaired in an imperfect manner is readily completed with this procedure.

In the same year, 1968, but at the opposite end of the earth at Lady Ridgeway Hospital for Children, Colombo, Ceylon, Dr. S. F. Wickramasinghe wrote:

Doctors Furnas and Stokley left behind the rotation-advancement operation for cleft lip. I do not wish to sound boastful, but I honestly believe that my results have improved since my conversion.

AN ALLENTOWN COMPARISON

It was rumored that Allen Trevaskis of Allentown had actually dared to use the rotation-advancement method in the "lion's

den." I wrote him in June of 1972, and the reason he gave for his change is confusing, as is the summation of his results, but you had better hear it directly from him:

As Dr. Marcks' associate I had at least 10 years experience in the repair of unilateral cleft lip with the triangular flap method, as conceived by Dr. Tennison and modified by Dr. Marcks.

When you published your first paper, I decided to convert to your method—not because I was dissatisfied, I simply felt that it would be a good opportunity to see if one method was better than the other.

From that time to the present, Dr. Marcks and I "went our different ways" in so far as this specific bit of surgery was concerned. Our friendly competition to produce the best lip permitted an on-the-spot comparison of the two methods.

Naturally my early trials with the rotation-advancement method were punctuated with new problems, but as time passed and as I kept reading your later bulletins—I found some of the answers.

In my experience at least several points of comparison are worthy of notation:

1. The rotation-advancement does not lend itself to building a balanced nasal floor as well as the Marcks' method.
2. The rotation-advancement technique frequently produces a more noticeable scar in the upper $\frac{1}{2}$ of the lip.
3. The scars of the Marcks lip are quite thin (by comparison) but this advantage is outweighed by the *unalterable direction of scars where scars should not be.*

I can honestly say that though the end results are different, one method is not superior to the other. The essence of the matter seems to be the experience and ability of the surgeon, plus a little bit of luck.

RANDALL'S RANDOMIZED COMPARISON

It is particularly encouraging that Randall is carrying out a series of cases for comparison in which he is operating upon infants with cleft lip at random, one-third by the Tennison-Randall procedure, one-third by the rotation-advancement and one-third by what he refers to as a "combination of the two." The third group is actually treated by the rotation-advancement plus Randall's triangular muscle flap taken from the cleft side and inserted into a pocket in the lower border of the medial element. He admits using the rotation-advancement approach in complete clefts but only after a preliminary adhesion. He also has his own



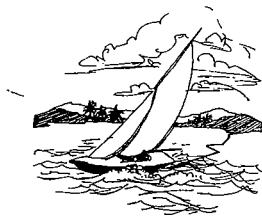
Allen Trevaskis

?!

*The italics
are mine*

cutoff point for use of the rotation-advancement method set at those cases in which the peak of the bow on the cleft side is more than 4 mm. short of the normal, requiring greater rotation. As he explained:

Poor results for me in the rotation-advancement method come when there has not been enough rotation and poor results in the triangular flap where there has been too much release.



As rotation has never been and should not be a problem and the value of Randall's randomized comparison seemed to hinge on the accuracy of his execution of the rotation, I was pleased when Peter accepted an invitation to stop over in Miami on his way to 1971 Christmas sailing off St. Thomas in the Caribbean. A wide cleft after a four-months adhesion was scheduled, and its execution from the radical rotation to the mucocutaneous interdigitation went well. Randall and I worked together to find a suitable place for the excess skin and mucosa of the "adhesion throw away" along the Muir-Horton-Cramer plan. A small Randall triangular muscle flap had been preserved. With the usual fullness on the non-cleft side, there seemed no real need for it in this case, and with due apologies it was finally discarded.

In discussion later Randall revealed a slight inflexibility when he still insisted that in the more radical rotations the necessity of crossing the midline offered the danger of lengthening the vertical height to a "Mickey Finn" lip. This crystallized for me where others must be hanging up and I presented the following clarification to Randall:

It is advantageous to cross the midline as marked by the mid-base of the columella but it is "against the law" to cross as far as the opposite philtrum column. Not only is the height of the bow on the cleft side short but so also to a lesser degree is the central point of the bow. Both must be lowered into normal position. The rotation may extend slightly past the center of the lip to let the center of the bow down. Then the cut-back will increase the remaining rotation without the necessity of entering the normal column on the opposite side. *As long as the distance from the alar base to the height of the bow peak on the normal side is unaltered and remains normal for that lip and as soon as the other two points of the bow are maneuvered into normal balanced position the game is won!*

Randall agreed.

In fact, at the 1973 Foundation Cleft Symposium at Duke University, Randall showed a fine result with the rotation-advancement method incorporating his inferior muscle flap. It was in an incomplete cleft, but it is a good beginning.



RUT JUMPING

It is asking a lot to expect a surgeon who has developed his own method and is proceeding with great momentum suddenly to check and veer or "come about." Almost as difficult is it to dislodge an established surgeon set in his ways. Thus, older surgeons are less likely to change while residents, unencumbered, are more receptive. In general, such has been the case with the rotation-advancement even in programs headed by a chief who is adamant in his loyalty to some outmoded method. In most teaching programs the chief will let the residents make their own choice from several standard methods; if not, they merely wait until they are free. . . .

There are established surgeons who enjoy an "open attitude" and with it the ability to adapt, which is responsible for their being able to improve constantly on their own performance.