

33 $\frac{1}{3}$. A Small Chapter on a Millimeter Modification

THERE is still a small corps of surgeons who do not understand the back-cut and, rather than include it at the end of the rotation incision, prefer to place it separately in the inferior portion of the lip.

In 1966 Takuya Onizuka proposed in the *Japanese Journal of Plastic and Reconstructive Surgery* a tiny Tennison flap as an adjunct to the rotation-advancement method much as Skoog had done years before. In 1972, from Showa University in Tokyo, Onizuka elaborated in English his preference for the rotation-advancement principle. After 2,000 cases he concluded:

All methods have advantages and disadvantages. Millard's method is no exception.

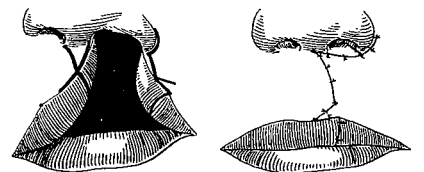
He then describes what he considers the disadvantage:

Especially, elevation of the cupid's bow on the cleft side is conspicuous and the shape of the cupid's bow on the cleft side is more peaked if compared with the smoothly curved shape of the normal cupid's bow.

Acknowledging my 1 to 1.5 mm. "white roll" flap and expressing his fear of the Tennison-Randall larger triangular flap causing cupid's bow droop "due to overgrowth of the triangular flap," he suggests using the rotation-advancement method but inserting a small triangular 2.5 mm. flap at the mucocutaneous junction. In other words, Onizuka is joining Skoog's earlier design by adding 1 mm. to the white roll flap.

Onizuka says:

*This is more
a matter of
Craftsmanship*



If the difference of the two peaks is over 3 mm., the small triangular flap (limited to 2.0 mm.) should be used. Otherwise Millard's method must be applied.

He is against use of the standard triangular flaps of Tennison and Randall in infants because of the resultant distortion that occurs from what he refers to as "the rapidness of the growth of the lip." He admits, however:

The limit of the flap should be less than 2.5 mm. but it is not clear presently about how much of a deformity will occur after operation since it has only been a few years since application in infants.

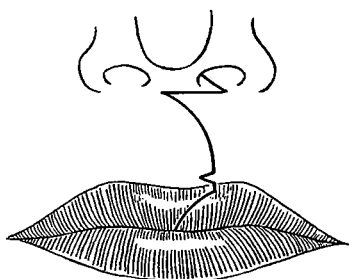
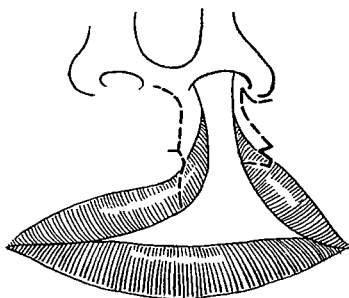
As this flap calls for an increase of only one millimeter or less from the original white roll flap, we are now quibbling over split millimeters. Yet, in principle, I must say again, if the back-cut is used properly, it does not matter what the original difference in the height of the peaks of the bow is. The 1.5 mm. wide white roll flap is not designed to lengthen the cleft side even though it can do so slightly; its main purpose is camouflage: to construct a continuous white ridge across the scar of union at the mucocutaneous junction. It should be made, therefore, the width of each specific white roll, whether it be 1 mm. or 2 mm.



Jean Lintilhac

Also in 1966 Jean Paul Lintilhac with J. P. Cochain of Paris discussed the rotation-advancement method:

Theoretically, the curvilinear skin scar, not interrupted by a flap, best imitates the philtral ridge.



On this last point, our experience in particular with Moroccan infants, who are very prone to form hypertrophic and retracted scars, has shown us that often an upward retraction of the mucocutaneous line occurs. This problem must have been encountered by Millard, since in an article published recently [1964] he describes a small rectangular flap involving only the mucocutaneous junction, a modification which he had personally communicated to one of us at the end of 1962, but which when tried did not seem to entirely resolve the problem for us. This is why, since 1963, we have returned in the majority of cases to a small, triangular flap, which we previously used in association with the rotation-advancement flap.

Actually from the diagrams of their design, it seems there is very little difference from the 1964 rotation-advancement including the tiny mucocutaneous flap.

AGAIN A MATTER OF A MILLIMETER

Then came a similar hybrid which will receive more attention than it deserves because of the principle involved. Leslie Bernstein, A South African E.N.T. surgeon at the University of Iowa Medical Center, in 1969 was quoted by the *J.A.M.A.* "Medical News" under the misleading heading, "Repair Procedure Returns 'Pout' to Wide Cleft Lips." He said:

Because the standard procedure is so good . . . I selected only candidates . . . that were certain to be failures with standard procedures.

His photograph of what he referred to as "conventional results with a similar congenital defect" revealed his lack of adequate rotation and inadequate use of the lateral advancement.

In 1970 he reemphasized what he called a modified rotation-advancement operation using the same "Tennison type but Randall sized" flap that Skoog described in 1958, Meyer presented in Hamburg in 1966 and Onizuka published in Japanese in 1966. His motive seems commendable as he adopted a quote from McDowell to be used in his own context:

. . . any new design will be adopted alike by superb, average, and clumsy surgeons. . . this modification . . . is being offered for use in wide unilateral clefts of the lip in the hope that it will produce improved results.

(It never occurred to me to design an operation for a clumsy surgeon, but it *is* a thought!)

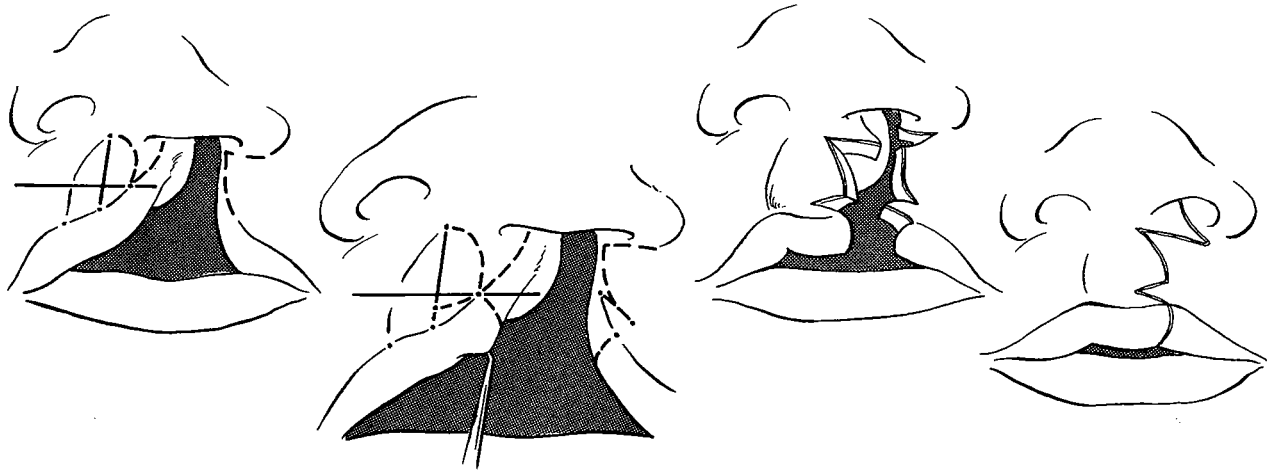
In his address to otolaryngologists interested in plastic surgery at the American Academy of Facial Plastic and Reconstructive Surgery Meeting in New Orleans in 1969, he restated, in a British accent, an old wives' tale:

This is an excellent procedure for partial and narrow clefts. . . . When applied to wide clefts there is often a tendency to contraction of the main scar, so that a short lip results . . .



Leslie Bernstein

not new!



Yes, if the method is not done correctly, this and other secondary deformities can occur. Then he repeats another common misunderstanding:

Also, when the cleft is wide, there is a need to extend the incision for the rotation flap beyond the midline in order to gain additional vertical height.

This surgeon keeps referring to more recent descriptions of the rotation-advancement operation but continues to use them to whatever advantage suits him and completely ignores the important message in the later work, i.e., the back-cut, which is the essence of rotation negating any need to cross the column and enter the uncleft side of the lip. A study of Bernstein's marks on one of his complete clefts reveals lack of back-cut in rotation and lack of nasal extensions for advancement and explains why he had trouble.

Another inaccuracy reads,

Not infrequently the vermillion grows into the lower part of the scar, leaving a permanent red streak.

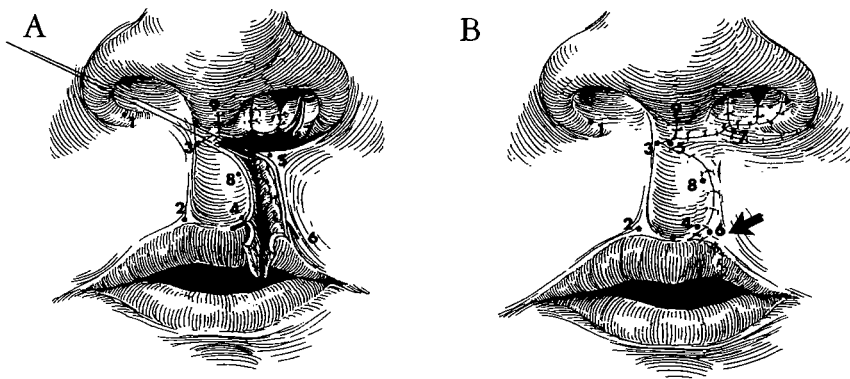
The vermillion does not grow into anything. The skin scar extending directly to the vermillion gives the eye the effect of an extension suggestive of a contracture. For this problem he does get his statement correct:

To overcome this Millard has designed a narrow little skin flap from the lateral segment to create the white ridge at the vermillion-cutaneous border.

The white roll flap measures 1 to 1½ mm. in width, and Bern-

stein has gone to all this trouble to justify increasing this flap 1 to 2 mm. more.

It is amusing that Gerald Hodge, Professor of Art, University of Michigan, for Grabb, Rosenstein and Bzoch drew the white roll correctly in one sketch (A) and in another (B) inadvertently made the flap 1 mm. wider at its base, a cross between my white roll flap and the Onizuka-Bernstein flap. Bernstein accused me of using "his" flap without giving him credit!

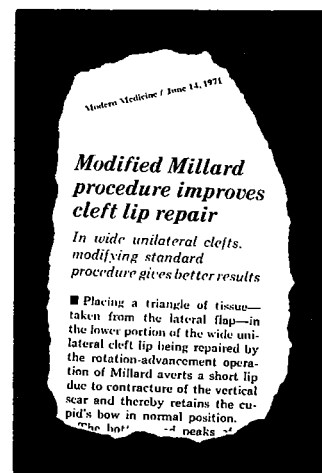


There was so little difference that I actually missed the artist's very slight discrepancy but suggest *you* do not!

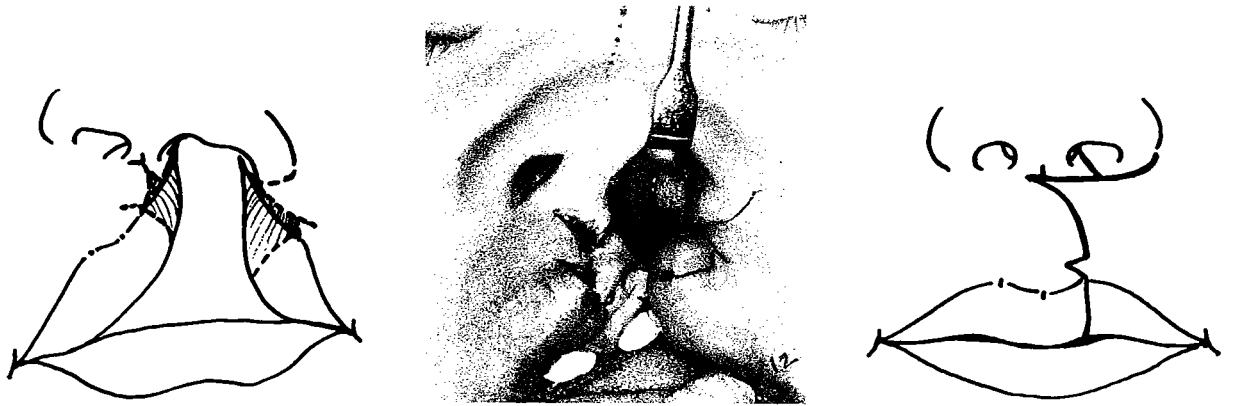
This questionable modification publicized by *Medical News* with its second inferior triangular flap is similar in principle to what Skoog proposed 12 years before. Yet, in my experience, this interruption in the philtrum column and violation of the dimple is unnecessary if the surgeon executes the rotation and the advancement correctly. That view seems substantiated by the results published by Bernstein, who, in my opinion, has tried to milk a mile out of someone else's millimeter.

DOUBLE ROTATION

Motomasa Sasaki of Sapporo, Japan, when grading his rotation-advancement cases, reported an occasional peak of the bow on the cleft side to be high. To counteract this contracture or failure to rotate sufficiently, Sasaki in 1969 developed a double rotation-advancement, a large high one as in the original Millard and a little low one as in Skoog, but as a curved rotation incision rather than the Z of Tennison. During Sasaki's visit to Miami



in 1971 he was introduced to the back-cut in the high rotation to save him the need for the low rotation incision. He seemed particularly pleased with a demonstration of the white roll interdigitation at the mucocutaneous junction line.



A P L E A

It is hoped that Onizuka, Meyer, Sasaki, Lintilhac, Perko, Bernstein, and others similarly tempted to act at this low level, as their experience increases, will perfect the back-cut and forget the "low cut" except as a camouflaged white roll.