

The YEAR BOOK of

# Plastic and Reconstructive Surgery

1980

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#### Editor

## FREDERICK J. McCOY, M.D.

Clinical Professor of Surgery (Plastic), University of Missouri at Kansas City, School of Medicine; Chief, Division of Plastic Surgery, The Truman Medical Center and the Children's Mercy Hospital

#### Associate Editors

#### RAYMOND O. BRAUER, M.D.

Clinical Professor of Plastic Surgery, Baylor College of Medicine

### REED O. DINGMAN, M.D., D.D.S.

Professor Emeritus of Surgery and former Head of Section of Plastic Surgery, Department of Surgery, The University of Michigan; Staff, Department of Plastic Surgery, St. Joseph Mercy Hospital, Ann Arbor, Michigan

#### DWIGHT C. HANNA, III, M.D.

Medical Director and Director of Plastic Surgery, The Western Pennsylvania Hospital, Pittsburgh

## B. W. HAYNES, JR., M.D.

Professor of Surgery and Chairman, Division of Trauma Surgery, Medical College of Virginia, Health Sciences Division, Virginia Commonwealth University, Richmond

### ROBERT J. HOEHN, M.D.

Clinical Professor of Surgery and former Chairman, Division of Plastic and Reconstructive Surgery, University of Colorado Health Sciences Center, Denver The YEAR BOOK of

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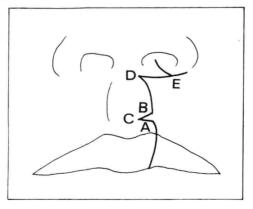
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# **Congenital Anomalies**

CLEFT LIP AND PALATE

Cleft Lip Repair: Modification of Rotation-Advancement Method for Unilateral Cleft Lips. The rotation-advancement flap method of repairing primary unilateral cleft lip, developed by Millard, preserves the philtral ridge on the cleft side, but extension of the incision for the rotation flap to the philtral column on the noncleft side in complete cleft cases induces a break in the upper philtrum. Onizuka added a small triangular flap to the Millard procedure. Y. Nishimura¹ (Kawasaki Med. School, Kurashiki, Japan) found a modification of this approach to be most successful. The procedure is illustrated in Figure 1. There is a tendency for the scar across the ridge to be depressed. If the vertical line across the vermilion roll becomes a wide, depressed scar,

Fig 1.—The lip is fitted together with preservation of the natural landmarks. See text. (Courtesy of Nishimura, Y.: Chir. Plast. 4:109-114, June, 1978.)



<sup>(1)</sup> Chir. Plast. 4:109-114, June, 1978.

continuity of the ridge is lost. Point A (Fig 1) therefore is fixed by a permanent buried nylon suture, and points B through E are sutured similarly as far as is possible.

With this method, the rotation incision seldom crosses over the midline of the philtrum, and the tip of the advancement flap is more lateral than Millard's. Shortening of the rotation incision preserves the upper philtrum and part of the nostril floor on the cleft side. The small triangular flap above the vermilion ridge facilitates making the Cupid's bow peak on the cleft side. In addition, it breaks a long vertical suture line from the columella base to the vermilion. Initially the peak of the Cupid's bow on the cleft side is slightly higher than that on the noncleft side, but in time the lip becomes symmetric. A good appearance of the lip results. Many cleft lips have been successfully repaired by means of this technique.

► [This procedure, as pointed out by the author, could limit, if not prevent, a back cut in the extremely wide cleft required in the classic Millard operation. There certainly is great appeal to put the release in the noncleft side low in the lip where the need is the greatest, and in many instances a zigzag or interrupted scar is less noticeable than a long continuous one. – R.O.B.]

New Method to Create a Philtrum in Secondary Cleft Lip Repairs. In 1975, five methods of philtrum reconstruction were reported. Takuya Onizuka, Tetuya Akagawa and Shinsuke Tokunaga² (Tokyo) now describe a sixth method that creates a more natural-looking philtrum and releases the skin tension of the upper lip, thus protecting against the disappearance of the newly made philtrum.

Technique. — The lip is cut through to the mucosa from the incision line (Fig 2,A). The ala is pulled up and the solid and dotted lines are the muscle layers. If only the philtrum is to be reconstructed, the mucosal layer of the lip is not included in the incision, and the incision at the nostril floor (Fig 2, B) is unnecessary. The medial and lateral side of the lip are undermined subcutaneously and submucously to separate the lip into three layers. Muscle flaps are created in the central and lateral segments (Fig 2, C). The lateral muscle flap is fixed to the septal cartilage by a 3–0-nylon suture to give the normal muscle alignment and to relieve the skin tension (Fig 2, D). The narrow central muscle flap is transposed to

<sup>(2)</sup> Plast. Reconstr. Surg. 62:842-847, December, 1978.

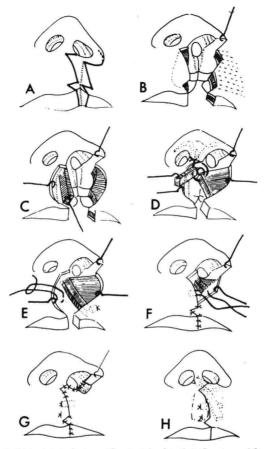


Fig 2.—A—H depicts technique. (See text for details.) (Courtesy of Onizuka, T., et al.: Plast. Reconstr. Surg. 62:842–847, December, 1978.)

the lateral one and fixed to make the philtral column; the skin of the central portion of the lip is fixed to the periosteum, or the mucosa, to make the philtral dimple (Fig 2, E). The skin is sutured with several dermal sutures to make the philtral column more definite (Fig 2, F). At the alar base, the excess skin (due to the medial migration of the lip skin) is excised or abraded, and the alar base is sutured to the proper position (Fig 2, G). The final relation-

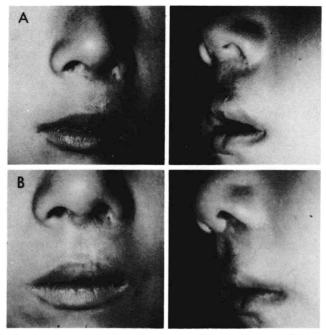


Fig 3. – A, preoperatively. B, 1 year after type VI repair. (Courtesy of Onizuka, T., et al.: Plast. Reconstr. Surg. 62:842-847, December, 1978.)

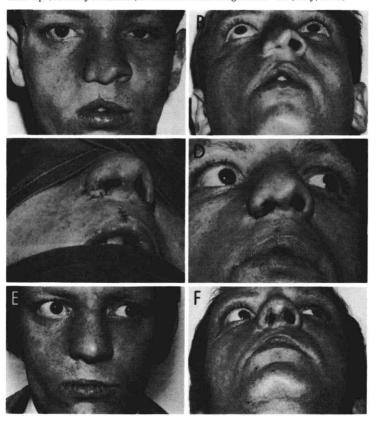
ship between the muscle flaps, muscle defect and fixation sutures is shown in Figure 2, H. If the philtral column of the normal side is not clear, the central muscle flap may be cut off.

The results in 206 patients treated with this new method were compared with those obtained in 84 patients treated with the earlier five methods. The new method, as a whole, gave better results than the others. It provides a good philtrum column, maintains the shape of the nasolabial triangle (region surrounded by the nasolabial groove, nostril floor and hairline of the moustache) and does not disturb the muscle function of the lip (Fig 3).

► [This is an ingenious method to create a philtrum. Not emphasized in the article is the authors' use of a combination of downward rotation with the triangular flap demonstrated by Y. Nishimura. – R.O.B.]

The Alar Base Composite Graft in Cleft Lip Noses. Although not claiming originality for the procedure, D. O. Maisels<sup>3</sup> (Prescot, England) presents this technique in secondary repair of the cleft lip alar deformity as an endorsement of previous reports.

Fig 4.—Result with the alar base composite graft in a patient with a cleft lip nose. A and B, original condition. C, immediate postoperative view. Note pallor of graft. D, 5 days postoperative. Graft is viable. E and F, result after further operation on nasal tip. (Courtesy of Maisels, D. O.: Br. J. Plast. Surg. 31:220-221, July, 1978.)



<sup>(3)</sup> Br. J. Plast. Surg. 31:220 - 221, July, 1978.