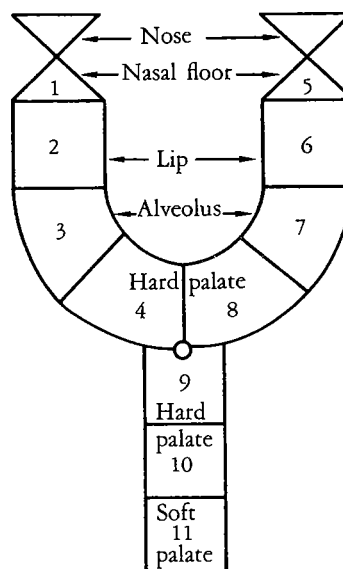


# 29. Examples of Incomplete Clefts of Varying Degrees

## KEY TO CODE ON CASES

B.D.	birth date
F.H.	family history
FT.	first trimester
O.C.A.	other congenital anomalies
Op	operation
Ad	adhesion
Adv	advancement
Rot	rotation
R-A	rotation-advancement
H.P.	hard palate
S.P.	soft palate
B.G.	bone graft
b-c	back-cut
wr	white roll flap
c	flap c
col	columella



A cleft is indicated by stippling, a submucous cleft or submucous distortion by horizontal lines.

VERMILION NOTCH (CASE 1)



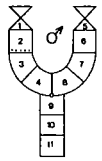
1. 8 months



2. 8 months



3. 6 weeks postoperative



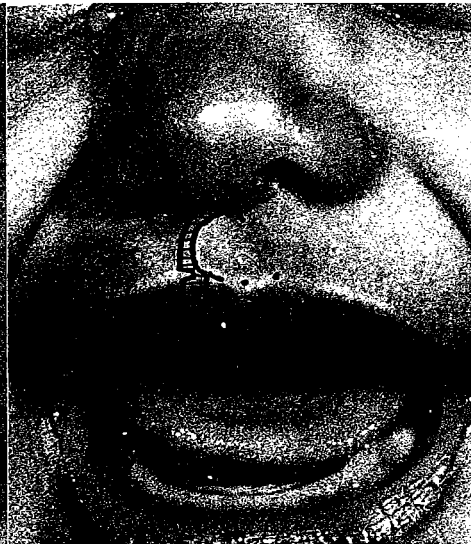
B.D.~ October 16, 1961  
 F.H. Unknown  
 F.T. Unknown  
 O.C.A. Internal strabismus

*Op.* Posterior V-Y roll-down of vermilion without skin incisions.

MINIMAL CLEFT WITH CONGENITAL SCAR (CASE 2)



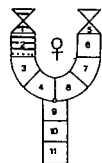
1. 6 months



2. 6 months



3. 3 years



B.D. May 15, 1968  
 F.H. No clefts  
 F.T. uneventful  
 O.C.A. None

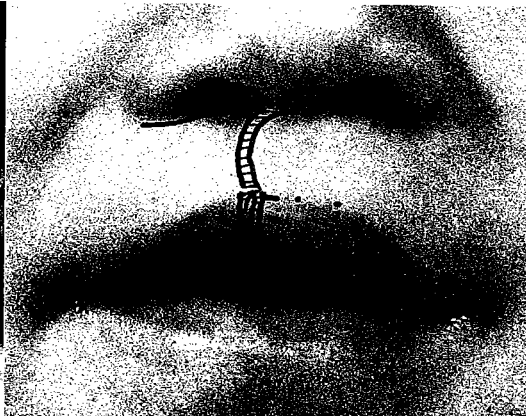
*R-A.* At 6 months  
*Op.* 1. Rot with b-c. 2. c for col.  
 3. Adv. with wr. 4. Alar base D denuded for insertion into columella base.

*Comment.* Congenital scar with vertical shortness of lip and width of nasal floor required scar excision and moderate rotation and advancement to give natural balance.

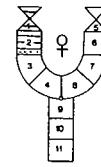
MINIMAL CLEFT WITH CONGENITAL SCAR (CASE 3)



1. 7½ months



2. 7½ months



B.D. March 21, 1964  
 F.H. No clefts  
 F.T. Uneventful  
 O.C.A. None

R-A. At 7½ months  
 Op. 1. Rot with b-c. 2. c for col.  
 3. Adv with wr. 4. Cleft vermilion  
 edge interdigitation into non-cleft  
 at free border.



3. 2½ years



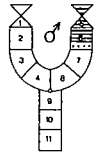
4. 2½ years



5. 7½ years

*Comment.* Congenital scar with shortening and vermilion notch required scar excision, moderate rotation and advancement, nasal floor wedge excision, muscle suture and vermilion interdigitation to achieve balance.

# MINOR CLEFT WITH CONGENITAL GROOVE (CASE 4)



B.D. September 4, 1964  
F.H. No clefts  
E.T. Uneventful  
O.C.A. None

R-A. At 6 months  
Op. 1. Rot with b-c. 2. c for col.  
3. Adv with wr. 4. Wedge from  
nasal floor.



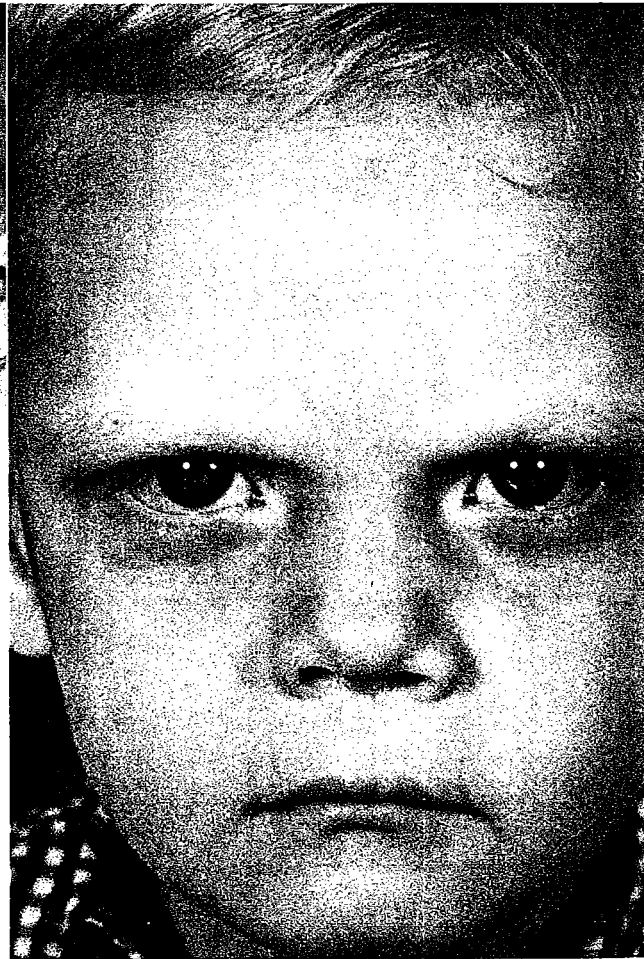
1. 6 months



2. 6 months



3. 1 year



4. 3 years

*Comment.* Important to preserve  
philtrum dimple and *cleft side* col-  
umn as much as possible.



MINOR CLEFT WITH CONGENITAL GROOVE (CASE 5)



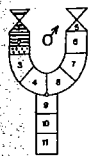
1. 18 months



2. 18 months



3. 8 1/2 years



B.D. March 1, 1964  
 F.H. No clefts  
 F.T. Uneventful  
 O.C.A. None

R-A. At 18 months  
*Op.* 1. Rot with b-c. 2. c for col.  
 3. Adv with wr. 4. Alar rim excision.  
*Healing.* Slight contracture.

*Comment.* Aim to preserve column on cleft side as well as normal side and still rotate dimple and bow into balanced position.

MINOR CLEFT WITH CONGENITAL GROOVE (CASE 6)



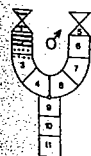
1. 5 months



2. 5 months



3. 2 years

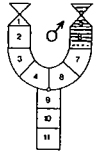


B.D. April 8, 1969  
 F.H. No anomalies  
 F.T. Mother had strep throat treated with penicillin and a "mycin" drug.  
 O.C.A. None

R-A. At 5 months  
*Op.* 1. Rot with b-c. 2. c for col.  
 3. Adv with wr. 4. Alar rim excision.

*Comment.* Scar balances opposite column maintaining central dimple.

# MINOR CLEFT (CASE 7)



B.D. November 2, 1970

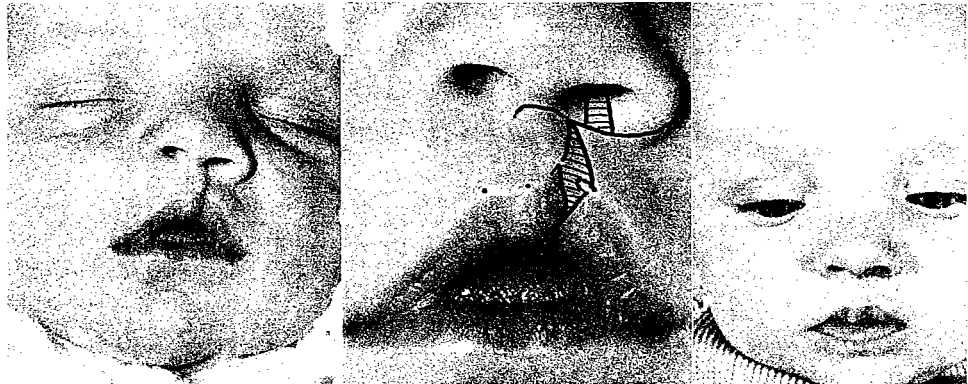
F.H. No clefts

F.T. Uneventful

O.C.A. None

R-A. At 3½ months

Op. 1. Rot with b-c. 2. Adv with wr. 3. Posterior mucosal interdigitation.



1. 3½ months

2. 3½ months

3. 9 days postoperative



4. 10 months



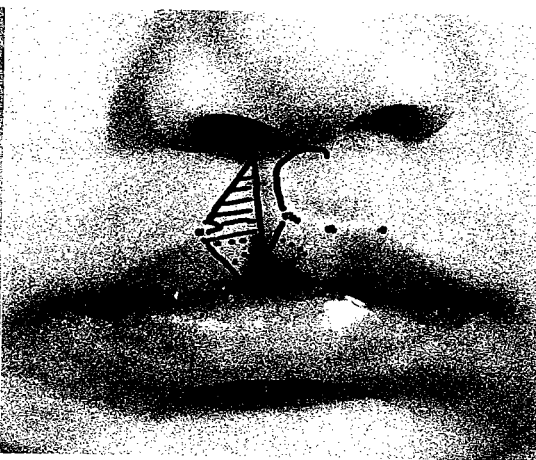
5. 10 months

*Comment.* More rotation necessary than obvious at first glance.

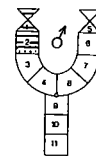
MINOR CLEFT (CASE 8)



1. 7 months



2. 7 months



B.D. July 29, 1963  
 F.H. No clefts  
 F.T. Uneventful  
 O.C.A. None

R-A. At 7 months  
 Op. 1. Rot with b-c. 2. c for col.  
 3. Adv with wr.

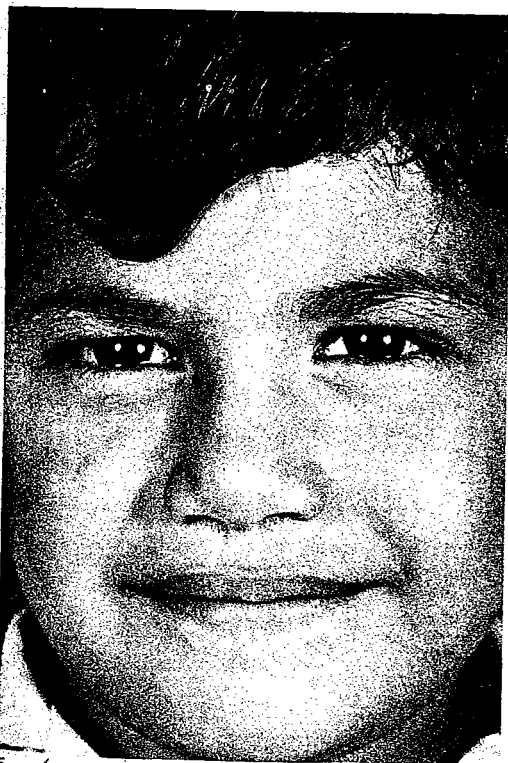
Revisions. At 1 year. 1. Excess vermillion trim. 2. Small scar revision.



3. 9 months



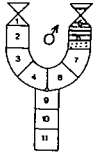
4. 4 years



5. 4 years

Comment. Scar excision with slight rotation and advancement plus the white roll flap achieved balance.

## MINOR CLEFT (CASE 9)



B.D. May 3, 1960

F.H. Only one male sibling  
with congenital lip scar  
and cleft

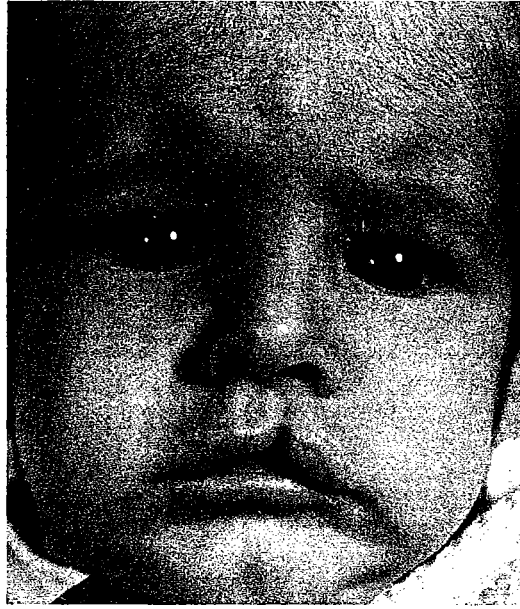
F.T. Uneventful

O.C.A. None

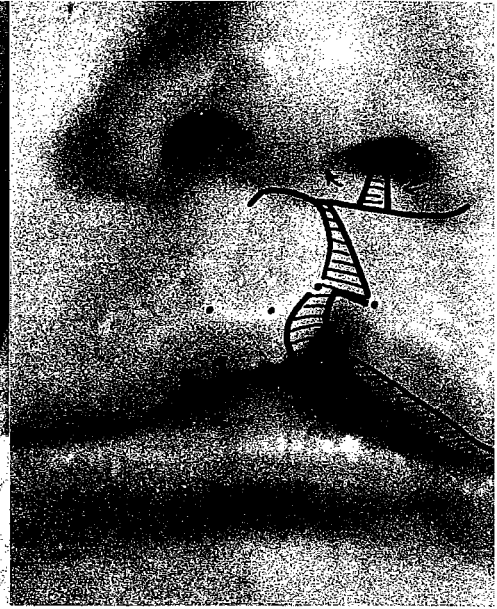
R-A. At 4 months

Op. 1. Standard R-A without re-  
finements except c for col. 2. Lateral  
overlap of vermillion mucosa.

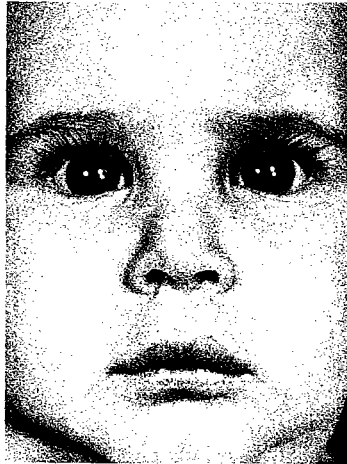
Revisions. 14 months postoperative  
slight upper scar excision, vermilion  
trim on cleft free border.



1. 4 months



2. 4 months



3. 6 months



4. 1 year

Original deformity and early result  
published in *Plast. Reconstr. Surg.*  
33:36, 1964.

*Comment.* Lateral lip element thicker  
and longer vertically than non-cleft  
element. By elevation of advance-  
ment into rotation gap this dis-  
crepancy was benefited.



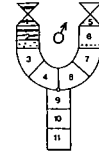
MINOR CLEFT (CASE 10)



1. 2 months



2. 2 months



B.D. February 3, 1962  
 F.H. No clefts  
 F.T. One day of nausea, cramps, diarrhea  
 O.C.A. None

R-A. At 2 months  
 Op. 1. Rot with b-c. 2. c for col. 3. Adv with wr. 4. Wedge from nasal floor. 5. Trimming of normal vermillion free border.

Revisions. 3 years later. Revision of vermillion vertical and horizontal free border trimming.



3. 1 month postoperative



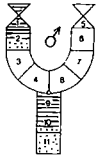
4. 4 years



5. 10 years

Comment. This was almost a bilateral cleft but effectively corrected with a unilateral rotation-advancement and a white roll flap.

# HALFWAY CLEFT (CASE 11)



B.D. May 29, 1957  
 F.H. No clefts  
 E.T. Uneventful  
 O.C.A. None

*R-A.* At 3 months  
*Op.* Early standard R-A without refinements and with interdigitation of vermillion at free border.  
*H.P., S.P.* V-Y pushback at 11 months.

*Revision* at 11 months. Cleft side vermillion trimmed.



1. 3 months



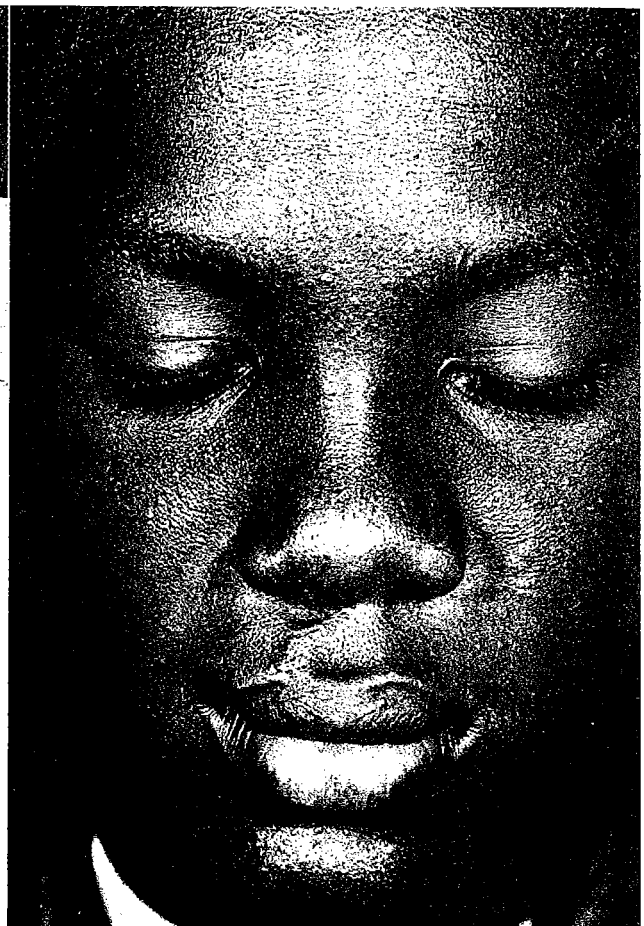
2. 3 months



3. 1 year



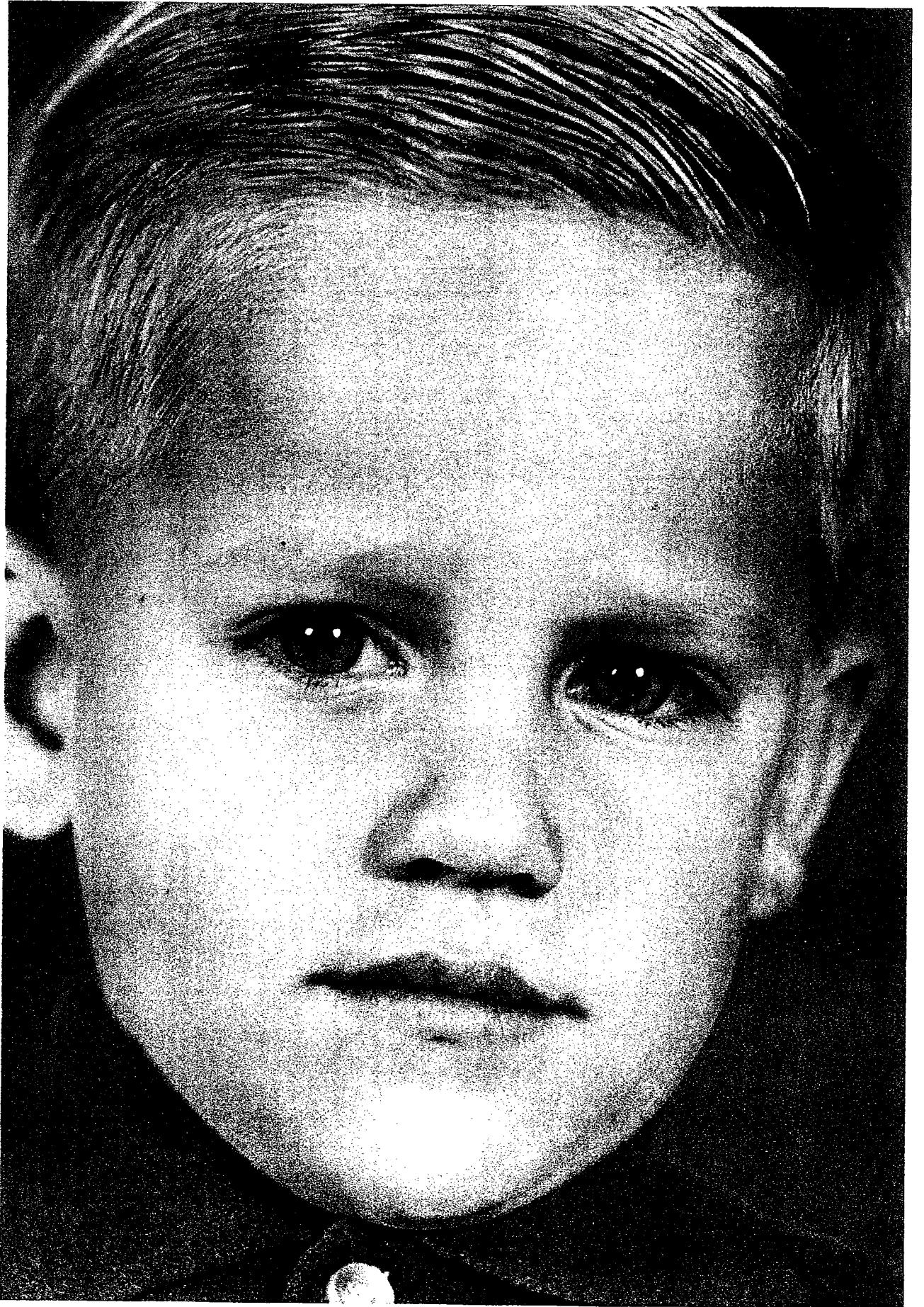
4. 8 years



5. 15 years

*Comment.* A well-balanced result even though white roll flap not being used yet. Here muscle tissue from the cleft edge would be used to fill out the depression in the upper portion of the lateral lip element primarily now.

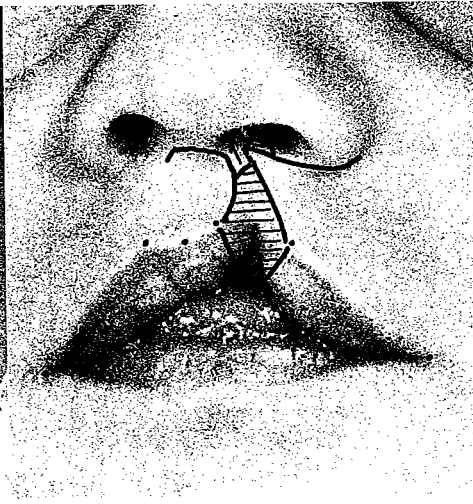




HALFWAY CLEFT (CASE 12)



1. 3 months



2. 3 months



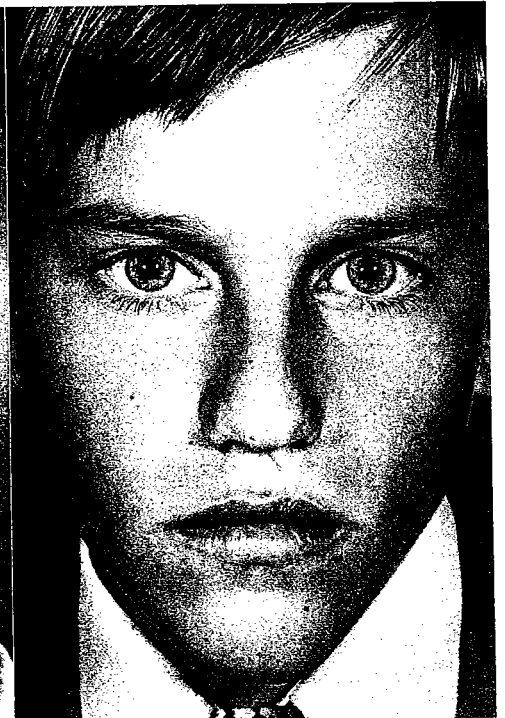
3. 4 months



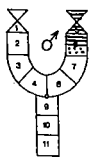
4. 5 years



5. 10 years



6. 13½ years



B.D. October 5, 1959  
 F.H. Mother has cleft nose deformity without cleft lip. Half-brother on maternal side has cleft lip with nasal deformity and alveolar defect.  
 F.T. Uneventful  
 O.C.A. None

R-A. At 3 months  
 Op. R-A without refinements. No wr flap.

Revision. At 1½ years. Mucocutaneous white roll created by tiny skin graft from arm.

Original deformity and early result published in *Cleft Lip and Palate* by Grabb, Rosenstein and Bzoch, 1971.

Comment. White roll continuity achieved by 1 mm. skin graft from the arm as primary white roll flap was not being used in 1959. Patient does not know he had a cleft.

## HALFWAY CLEFT (CASE 13)



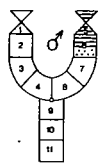
1. 4½ months



2. 4½ months



3. 2 weeks postoperative



B.D. May 22, 1962  
 F.H. No clefts  
 F.T. Uneventful  
 O.C.A. None

R.A. At 4½ months  
*Op.* 1. Rot with b-c. 2. c for col.  
 3. Adv with wr. 4. Nostril floor  
 wedge excision. 5. Alar rim excision.

*Comment.* The muscle deficiency in the upper portion of the lateral lip element is not evident in early postoperative photo. Muscle flap from medial element would be inserted into this deficiency during the primary procedure if done today.

## 2/3 WAY CLEFT (CASE 14)



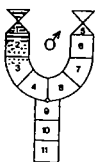
1. 4½ months



2. 4½ months



3. 1 year



B.D. April 30, 1968  
 F.H. No clefts  
 F.T. Medication to prevent miscarriage  
 O.C.A. None

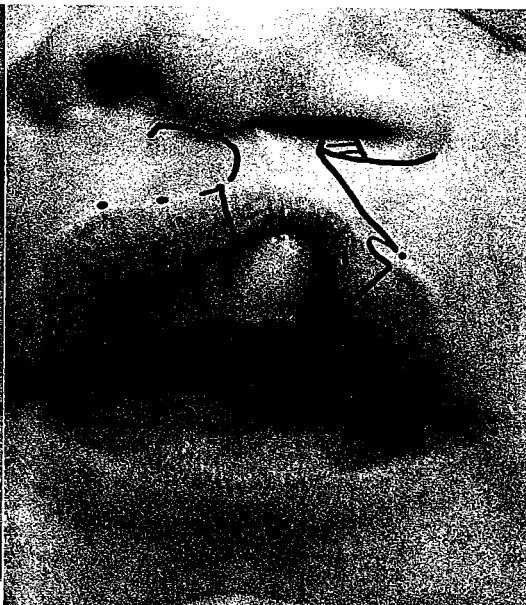
R.A. At 4½ months  
*Op.* 1. Rot with b-c. 2. c for col.  
 3. Adv with wr.

*Comment.* Upper portion of lateral lip element thin and deficient in muscle. Muscle flap from edge of medial element would have filled out the contour.

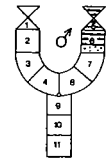
HALFWAY CLEFT (CASE 15)



1. 3 months



2. 3 months



B.D. November 20, 1964  
 F.H. No clefts  
 F.T. Uneventful  
 O.C.A. None

R.A. At 3 months  
*Op.* 1. Rot with b-c. 2. c for col.  
 3. Adv with wr. 4. Posterior medial  
 mucosal flap to cleft side.

*Revisions.* 1 year later. 1. Elliptical  
 excision from free border of cleft.  
 2. V-Y advancement of alar base.



3. 4 years



4. 8 years

*Comment.* Mucocutaneous ridge on  
 the lateral lip element flattened out  
 too soon in the original deformity  
 so that getting a strong ridge in  
 continuity across the cleft was diffi-  
 cult.



### *Twins and Clefts*

If any trait is solely genetically determined, there should be 100 percent similarity in monozygotic twins. This degree of concordance, however, is not found. As pointed out by Fogh-Andersen in 1942, any physical difference in monozygotic twins may be attributed to exogenous factors influencing the affected twin or to an arrest of manifestation in the apparently normal twin.

Metrakos, Metrakos and Baxter in 1958 reported a pair of monozygotic twins, one with CL(P) and the other normal. Ramsey and Wynn-Williams in 1960 reported a pair of monozygotic twins, one with left unilateral CL(P) and the other with bilateral CL(P). In 1966 Boo-Chai reported two pairs of monozygotic twins; one pair had a CL(P) and a normal mate while the other pair had a right CL(P) and the opposite twin had a left microform CL. In 1972 Blake and Wreakes reported five pairs of monozygotic twins; one pair had clefts of unequal degree while the other four pairs had one cleft and one normal each. Fogh-Andersen in 1971 published an account of a pair of monozygotic twins, one with unilateral CL(P) and the other with bilateral CL(P), and cited it as another example to support his theory that CP is genetically distinct from CL(P). He noted:

Twins studies in Denmark and other countries are the same; no single example of one twin partner having CL(P) and the other CP has yet been described.

Since then he has had further confirmation with another pair of monozygotic twins, one unilateral and one bilateral, and also a pair with an isolated cleft palate in one and a bifid uvula in the other.

In 1922 A. D. Davis noted a case of twins reported by W. L. Shearer in which there were

a boy and girl, one of whom had a cleft of the soft palate; the other a cleft of the hard palate and a single harelip.

#### *Identical Concordance in Monozygotic Twins*

In 1942 in Denmark, Fogh-Andersen reported out of a total of 867 clefts 26

twins, a twinning rate of 1:33. At the International Cleft Palate Congress in 1973 in Copenhagen, he reported 100 pairs of twins in over 5,000 clefts including 17 pairs of monozygotic twins. Among these were two pairs of identical concordant monozygotic twins. One pair had unilateral, left, complete CL(P); the other pair had unilateral, left, incomplete CL. There was also a pair with symmetrical or *mirror* type, right and left, complete CL.

In 1972, for England and Wales, Blake recorded for the year 1968, 819,272 live births, 8,697 twin pregnancies (twinning rate of 1:94) with 1,175 clefts. He extrapolated: expected number of monozygotic twins: 2,609 (30 percent of twins being monozygotic); expected number of clefts in twins:  $\frac{8,697 \times 2}{697} = 25$ . One-

third of this (8) should be monozygotic twins with clefts. If 30 to 40 percent of monozygotic twins with clefts are concordant (Fogh-Andersen, 1967), there should have been three concordant monozygotic twins in England and Wales in 1968.

In the U.S.A., with a 4,000,000 yearly birth rate and 47,500 twin live births (1:86), using the cleft rate of 1:750 one can extrapolate the number of twins with clefts:  $\frac{47,500 \times 2}{750} = 128$ . That is, 128

twins would be born with clefts yearly. One-third of them, or 42, would be monozygotic. Around 14 of these would be concordant. How many of the 14 would be symmetrically concordant is uncertain. Yet it seems quite unusual that there are only three examples of identical concordant cleft lips in monozygotic twins reported in the world literature (A. D. Davis, 1922; Fogh-Andersen, 1942, 1973). What is more, Davis in 1922 wrote many of his friends in large cleft surgery clinics, like Blair, Ivy, Federspiel, Gilmer and New, and asked if they had any such cases. They did not. Two instances of exact mirror image complete unilateral cleft lips have been reported (Shearer,

1921; Fogh-Andersen, 1962). Stellin and Frenkel in 1970 reported six twins with mirror image unilateral clefts.

There have been no reports concerning treatment of identical concordant clefts but as I have had a pair as patients, they are for your study. According to Colin Condron, once Medical Director of the University of Miami Mailman Center for Child Development, there is overwhelming evidence that these boys are monozygotic twins with a single placenta in a monochorionic state and common amnion, sharing most common blood group antigens (W. Bias), not refute mixed lymphocyte cultures (R. Warshawsky) and having remarkably similar dermal glyphics and ridge counts.

#### *Diamond Flaps for Twin Tubercles*

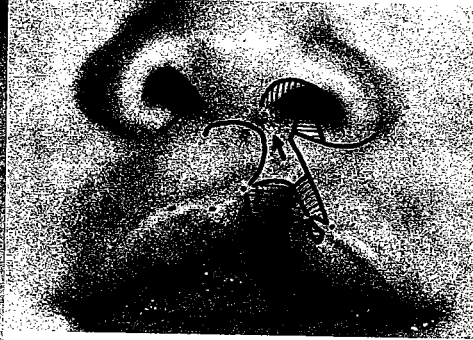
Each identical twin with his symmetrically concordant cleft not only had rotational advancement but received a "rotational" diamond-shaped posterior mucosal tubercle position flap to bolster his "rotational" tubercle.

No matter how carefully Nature attempts to duplicate or how diligently the surgeon attempts to assist her, identical twins are produced. Not only has one twin a difference in visual acuity requiring glasses, but the two lips show slight differences in their healing, growth and development. They are both, however, adjusted little gentlemen.

HALFWAY CLEFTS (CASE 16, 17)



1. 4½ months



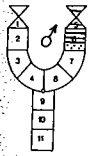
2. 4½ months



3. 16 months



4. 3 years



B.D. October 5, 1969  
(1st twin)  
F.H. No clefts  
F.T. Uneventful  
O.C.A. None

R-A. At 4½ months  
Op. 1. Mucosa of cleft edge cut as  
flap to line alveolus. 2. Rot with  
b-c. 3. c for col. 4. Adv with wr.

5. Posterior mucosal flap from cleft  
element cut as  $\diamond$  to create tubercle  
of cupid's bow. 6. Alar rim exci-  
sion.



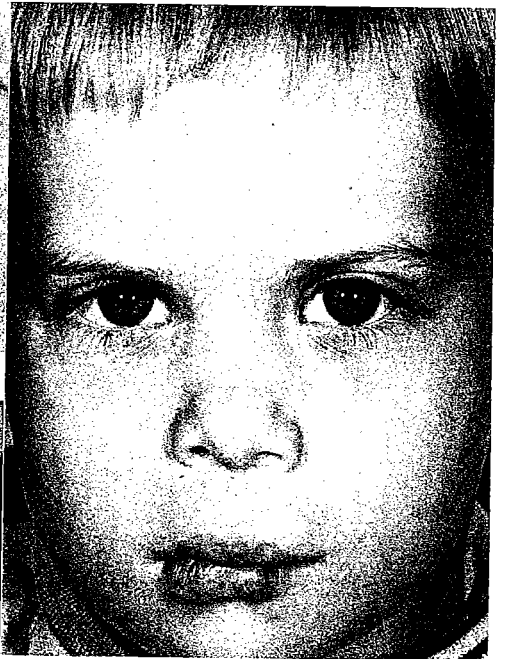
1. 4½ months



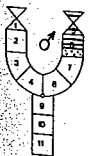
2. 4½ months



3. 16 months



4. 3 years

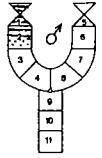


B.D. October 5, 1969  
(2nd twin)  
F.H. No clefts  
F.T. Uneventful  
O.C.A. None

*Comment.* Monozygotic twins with  
twin diamond posterior mucosal  
flaps.



# HALFWAY CLEFT (CASE 18)



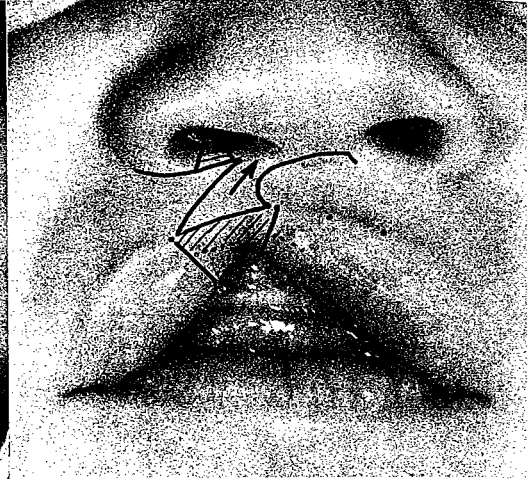
B.D. August 4, 1960  
 F.H. No clefts  
 F.T. Threatened miscarriage at 2 months  
 O.C.A. None

R-A. At 4 months  
*Op.* Standard R-A without refinements except c for col. No wr flap unfortunately.

*Revisions.* At 2 years. 1. V-Y tubercle. 2. Alar rim excision. At 10 years, double-breasted vest scar excision.



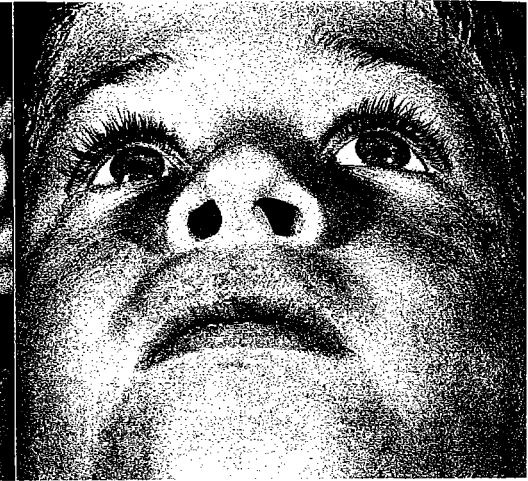
1. 4 months



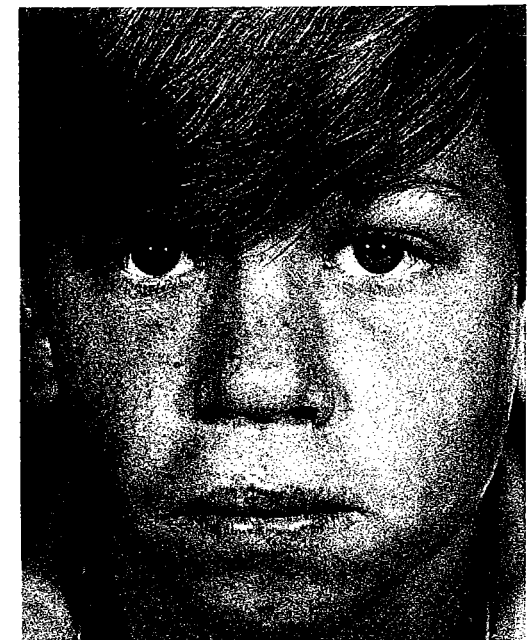
2. 4 months



3. 4 years



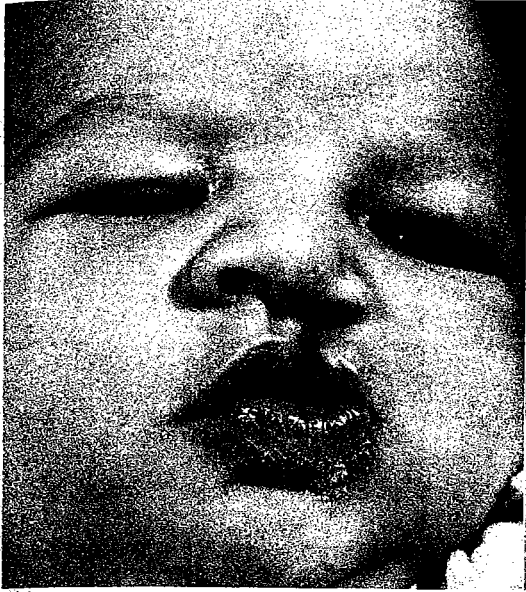
4. 9 years



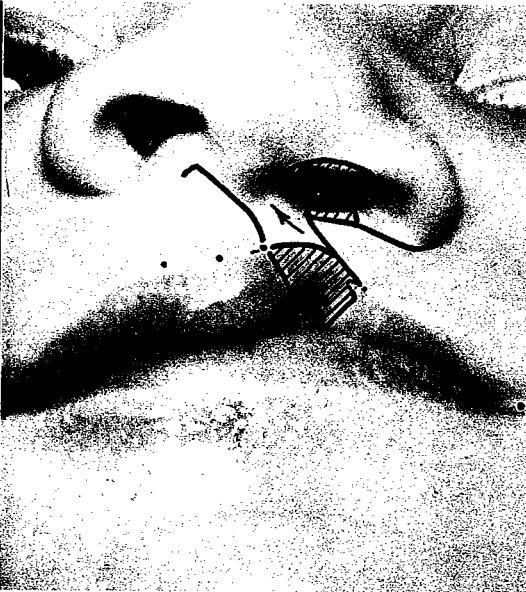
5. 12 years

*Comment.* My cover puzzle boy.

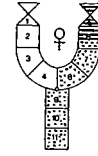
HALFWAY CLEFT (CASE 19)



1. 2½ months



2. 2½ months



B.D. October 7, 1963  
 F.H. No clefts  
 F.T. Uneventful  
 O.C.A. None

R-A. At 2½ months

Op. 1. Rot with b-c. 2. c for col.  
 3. Adv with wr. 4. Alar rim excision.

H.P. At 7 months, vomer flap closure of H.P.

S.P. At 18 months, island flap pushback.



3. 9 months

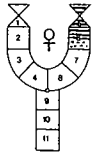


4. 5 years

Revisions. At 6 months. 1. Trimming of vermilion free border.  
 2. Alar base on normal side reduced. 3. Alar rim excision.

Comment. More of a cleft than visible but correctable with rotation and advancement.

# HALFWAY CLEFT (CASE 20)



B.D. November 28, 1963  
 F.H. No known anomalies but mother adopted  
 F.T. Uneventful  
 O.C.A. Hemangioma of chest

R.A. At 3½ months

Op. 1. Rot with b-c. 2. c for col.  
 3. Adv with wr. 4. Posterior mucosal interdigitation.



1. 3½ months

2. 3½ months

3. 1 year



4. 8 years



5. 9 years

*Comment.* Balanced lip and nose with continuous mucocutaneous white roll ridge.





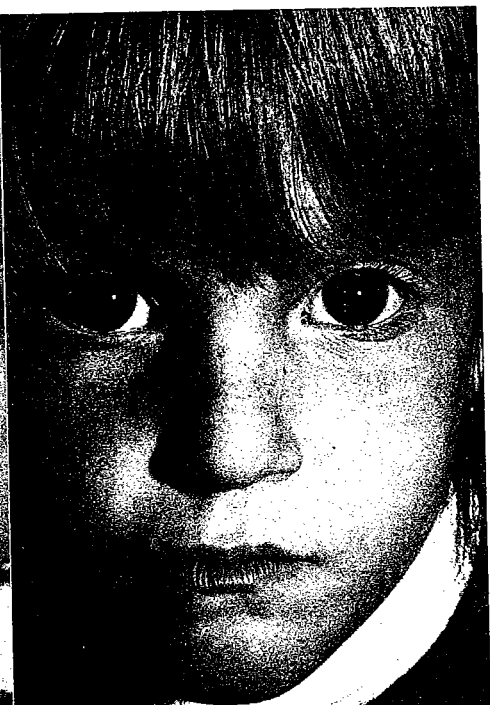
# ALFWAY CLEFT (CASE 21)



1. 5 months

2. 5 months

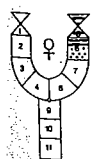
3. 8 months



4. 4 years

5. 4 years

6. 5 years



B.D. November 9, 1968  
 F.H. No clefts  
 F.T. Uneventful  
 O.C.A. None

*R-A.* At 5 months  
*Op.* 1. Rot with b-c. 2. c for col.  
 3. Adv with wr. 4. Posterior mucosal interdigitation. *But* nasal floor left intact! 5. Alar rim excision.

*Revisions.* At 2 years. Mucosal free border trim. Alar base wedge excision. White roll revision.

*Comment.* By keeping the slightly wide nasal floor *intact*, rotation and advancement was possible without reducing the cleft nostril too much primarily. When seen at age 5, a healed laceration of her right commissure was more noticeable than any residual effects of the cleft and its surgery.

## HALFWAY CLEFT (CASE 22)



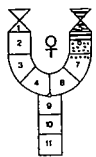
1. 3 months



2. 3 months



3. 1 year (healthy)



B.D. February 6, 1965  
 F.H. No clefts  
 F.T. Uneventful  
 O.C.A. None

R-A. 1st attempt at 3 months—  
 cardiac arrest. Completed at 4  
 months.  
*Op.* 1. Rot with b-c. 2. c for col.  
 3. Adv with wr. 4. Wedge from  
 nasal floor.

Hard scar at 6 weeks. At 3 months  
 soft, well-healed.

*Comment.* A happy ending after a  
 hazardous beginning.

## HALFWAY CLEFT (CASE 23)



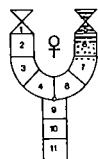
1. 8 months



2. 8 months



3. 14 months



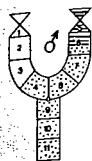
B.D. October 20, 1971  
 F.H. No clefts  
 F.T. Uneventful  
 O.C.A. None

R-A. At 8 months  
*Op.* 1. Rot with b-c. 2. c for col.  
 3. Adv with wr. 4. Alar base su-  
 tured to septum with nylon. 5. Pos-  
 terior mucosal interdigitation. 6.  
 Alar rim excision. 7. Mucosa scrap  
 to alveolus.

*Comment.* The difference in the  
 heights of the peaks of the bow on  
 the non-cleft element (6 mm.) is  
 equal to one-half the vertical length  
 of the upper lip (12 mm.). This  
 explodes the theory that a limit of  
 3 to 4 mm. (Randall; Cramer) is all  
 the lengthening that rotation can  
 achieve without crossing into the  
 normal side.



# HALFWAY CLEFT (CASE 24)



B.D. August 27, 1971  
 E.H. No clefts  
 F.T. Uneventful  
 O.C.A. None

R.A. At 4 months

Op. 1. Rot with b-c. 2. c for col.  
 3. Adv with wr. 4. Alar base denuded and sutured to septum.  
 5. Alar rim denuded and transposed as a flap.

S.P. Closure of soft palate and vomer to both sides of mucoperiosteum of hard palate. No lengthening.

Revision. Full-thickness horizontal excision of lip along nasal join to shorten cleft side slightly, a rare necessity.



1. 4 months



2. 4 months



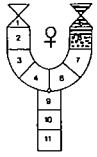
3. 2 months postoperative



4. 1 year

Comment. Nasal floor denuded as tip of alar base, which was advanced medially and sutured to the septum. Denuded alar rim flap transposed into the nasal tip crease.

# HALFWAY CLEFT (CASE 25)



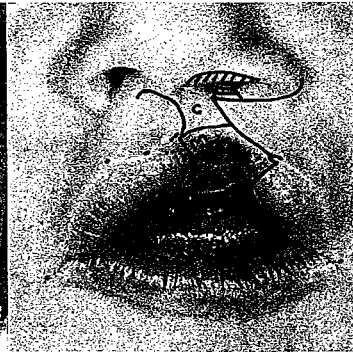
B.D. March 27, 1972  
 F.H. No clefts  
 F.T. Uneventful  
 O.C.A. None

R-A At 6 months

*Op.* 1. Mucosal edges of cleft used to line sulcus. 2. Rot with b-c. 3. c for col. 4. Adv with wr. 5. Medial muscle edge flap transposed under deficient tip of advancement flap. 6. Prolene key suture. 7. Wedge from nasal floor. 8. Alar rim excision.



1. 6 months



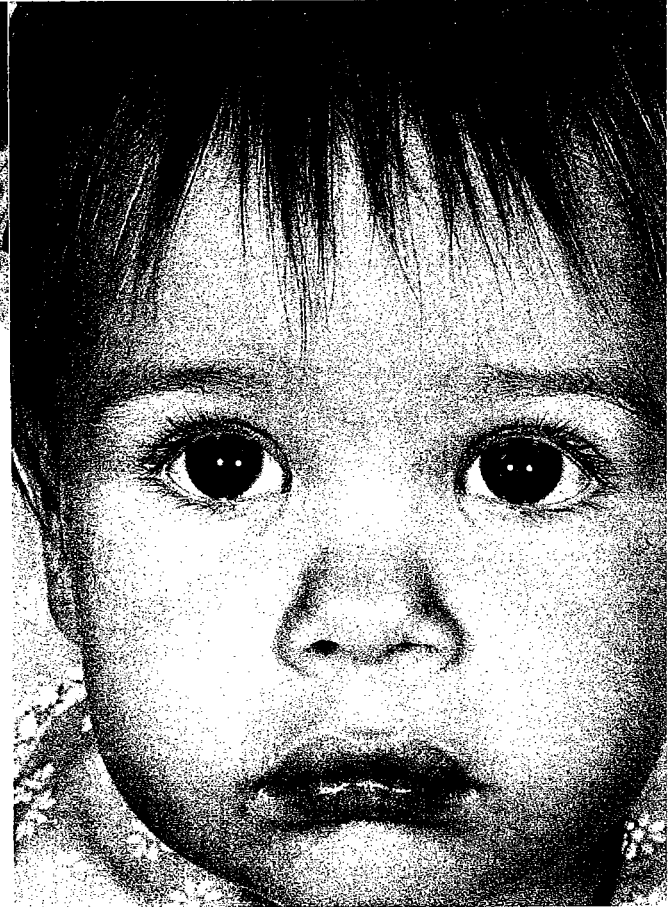
2. 6 months



3. 4 months postoperative



4. 10 months



5. 1 year

*Comment.* This is the incomplete cleft used for demonstration in Chapter 27.

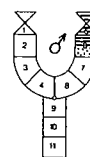
HALFWAY CLEFT SUBMUCOUS CLEFT ON THE OTHER HALF  
(CASE 26)



1. 5 1/2 months

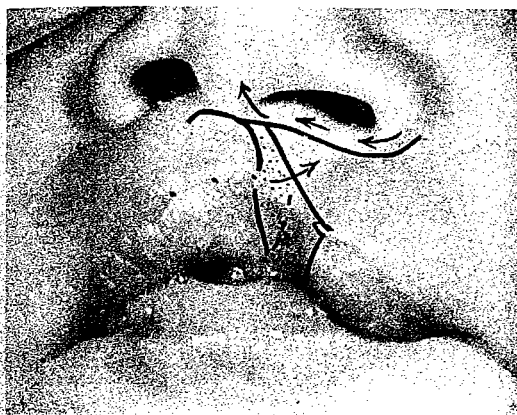


2. 5 1/2 months



B.D. May 24, 1972  
 F.H. No clefts  
 F.T. Spotting during early weeks  
 O.C.A. None

R.A. At 5 1/2 months  
 Op. 1. Rot with b-c. 2. Medial edge muscle flap into pocket in lateral flap groove. 3. Adv. with wr. 4. Flap c, nasal floor, and alar base intact and rotated clockwise.



3. 5 1/2 months



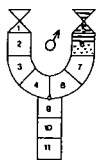
4. 4 months postoperative



5. 17 months

*Comment.* Medial muscle flap into pocket under groove to fill out deficient tip of lateral flap, a successful innovation.

## 2/3 WAY CLEFT (CASE 27)



B.D. July 13, 1957

F.H. No clefts

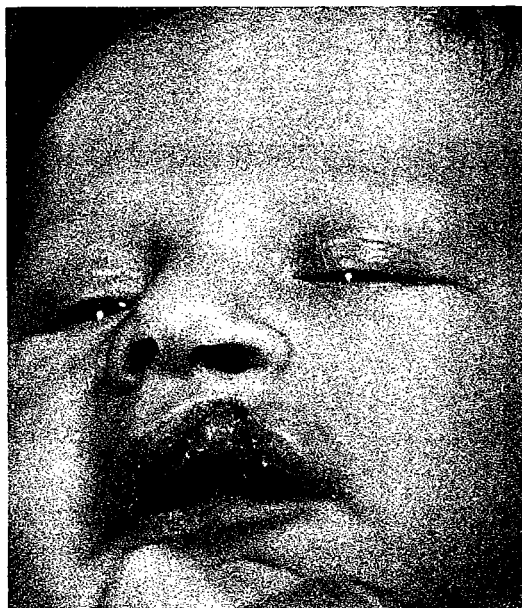
F.T. Uneventful

O.C.A. None

R-A. At 1 month

Op. 1. Standard R-A without refinements. 2. Alar rim excision. 3. Cleft vermilion interdigitation at edge posteriorly.

Revisions. At 5 years. 1. White roll flap transposed across scar at mucocutaneous junction. 2. Revision of free border vermilion.



1. 1 month



2. 1 month



3. 2 years



4. 5 years

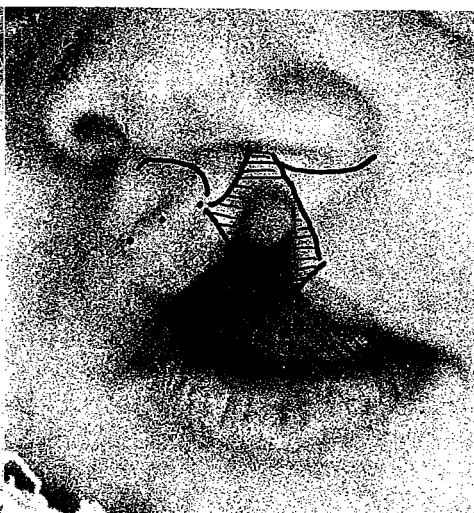
*Comment.* This was before white roll flaps were being done primarily.



2/3 WAY CLEFT (CASE 28)



1. 7 weeks



2. 7 weeks



3. 22 months



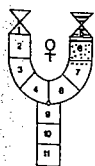
4. 28 months



5. 5 1/2 years



6. 5 1/2 years



B.D. January 25, 1958  
 E.H. No clefts  
 E.T. Uneventful  
 O.C.A. None

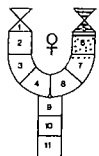
R-A. At 7 weeks  
*Op.* 1. Standard R-A without refinements. 2. Alar rim excision.

*Revisions.* At 10 months. 1. Alar rim excision. 2. Cleft vermilion excess excised. At 2 years same procedures.

Original deformity and early result published in *J. Fla. Med. Assoc.* 52:625, 1965.

*Comment.* The deficiency of muscle in the upper portion of the lateral advancement flap needs a muscle edge flap for extra contour.

2 / 3 WAY CLEFT (CASE 29)



B.D. February 21, 1958  
 F.H. 3rd cousin with cleft lip  
 and palate  
 F.T. Uneventful  
 O.C.A. None

R-A. At 2½ months

Op. 1. Standard R-A without re-  
 finements except c for col. 2. Cleft  
 vermillion overlap to non-cleft side.

Revisions. At 7 years revision of ver-  
 milion. At 14 years V-Y vermillion  
 tubercle, trimming excess cleft ver-  
 milion free border, alar rim excision  
 and a chin implant.

Original deformity and early results  
 published in *Plast. Reconstr. Surg.*  
 25:595, 1960, and *J. Fla. Med. Assoc.*  
 52:625, 1965.



1. 2½ months



2. 2½ months



3. 1½ years



4. 6 years



5. 14 years

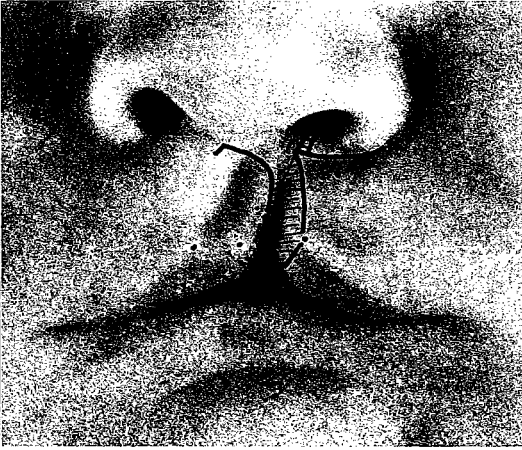
Comment. If she looks this nice at  
 14 years, she will be beautiful at 18.



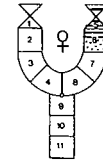
2/3 WAY CLEFT (CASE 30)



1. 3 1/2 months



2. 3 1/2 months



B.D. October 1, 1958  
 F.H. No clefts  
 F.T. Mother had leg infection first month  
 O.C.A. None

R-A. At 3 1/2 months  
 Op. 1. Standard R-A without refinements. 2. Cleft mucosa interdigitation behind free border. 3. Alar rim excision.

Original deformity and early result published in *Plast. Reconstr. Surg.* 33:35, 1964.



3. 2 1/2 months postoperative



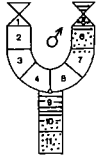
4. 4 years



5. 13 years

*Comment.* When patient was recalled at age 13, mother informed me that her daughter did not know she had had a cleft lip.

2/3 WAY CLEFT (CASE 31)



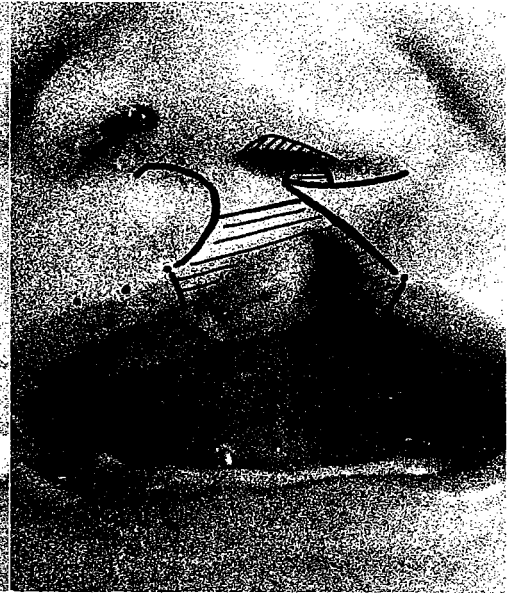
B.D. October 7, 1958  
F.H. Paternal cousin bilateral  
cleft lip and palate  
F.T. Uneventful  
O.C.A. None

R.A. At 6 weeks  
Op. Standard R-A without refine-  
ments.  
S.P. Island flap pushback at 3 years.

Revision. At 3 years. V-Y roll-down  
on cleft side vermillion.



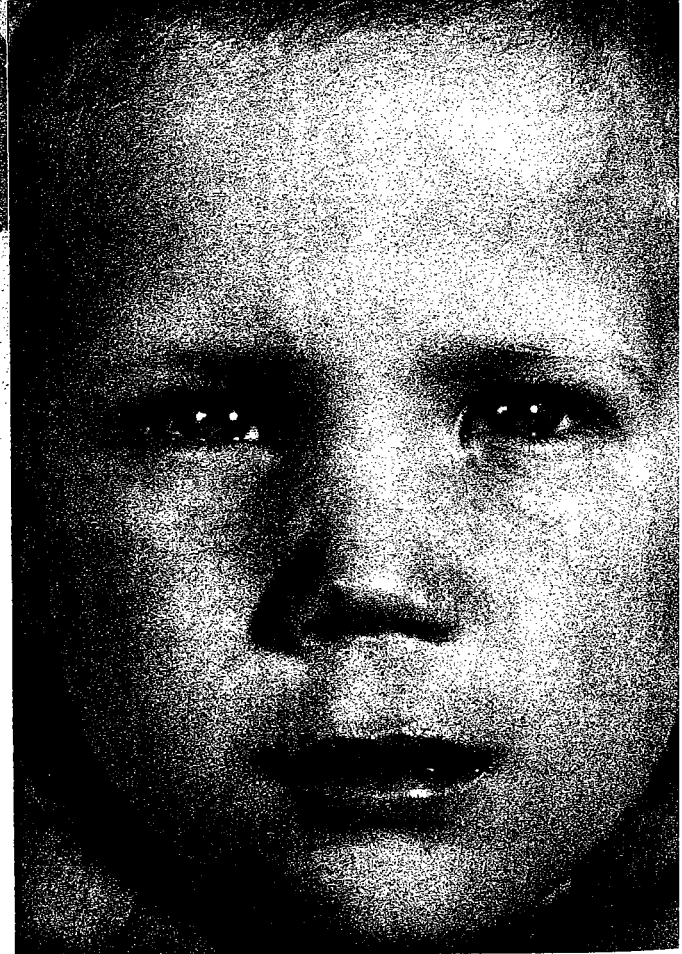
1. 6 weeks



2. 6 weeks



3. 1 week postoperative



4. 4 years

*Comment.* This case did pretty well  
without a white roll flap.

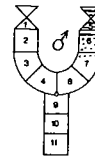
2/3 WAY CLEFT (CASE 32)



1. 3 1/2 months



2. 3 1/2 months

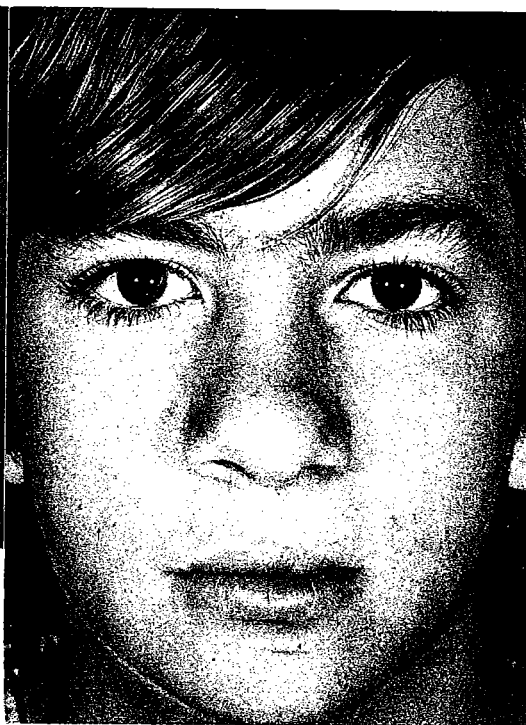


B.D. July 21, 1959  
 F.H. Father, 42; mother, 34;  
 no clefts  
 F.T. Uneventful  
 O.C.A. None

R.A. At 3 1/2 months  
 Op. 1. R-A without refinements. 2.  
 Cleft vermilion overlap to medial  
 element.



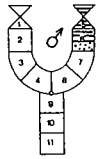
3. 2 weeks postoperative



4. 13 years

*Comment.* Lack of refinements in this early case shows lack of finesse. The vermilion flap from cleft side overlapping the non-cleft side tends to give an asymmetry requiring secondary revision. This is reason for subsequent change to straight closure at this point.

2/3 WAY CLEFT (CASE 33)



B.D. July 16, 1961  
 F.H. Father had left unilateral cleft lip and palate  
 F.T. Uneventful  
 O.C.A. None

R-A. At 2½ months

Op. 1. Rot with b-c. 2. c for col. 3. Mucosal flap from cleft to increase mid-tubercle. 4. Alar crescent excision.

Revisions. At 10 months postoperative. 1. Diamond excision at mucocutaneous junction. 2. Trim excision of cleft side vermillion. 3. Nostril sill excision-revision. At 9 years. 1. Again excision at mucocutaneous junction. 2. Alar rim excision. 3. Normal nostril reduced with alar excision.



1. 2½ months



2. 2½ months



3. 5 years



4. 9½ years



5. 9½ years

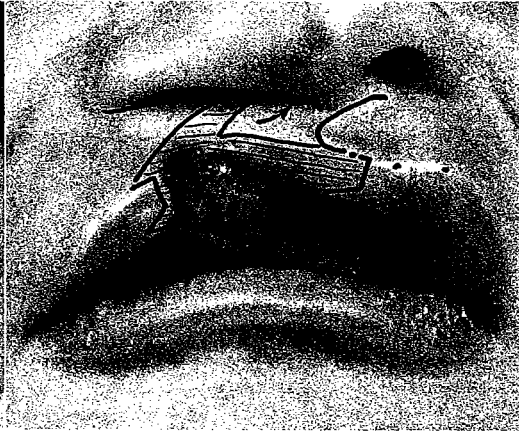
*Comment.* Mucocutaneous junction at scar not camouflaged by white roll flap primarily so never natural. Diamond excision in this area was not effective.



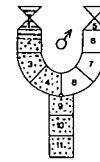
2/3 WAY CLEFT (CASE 34)



1. 2½ months



2. 2½ months



B.D. July 24, 1961  
 F.H. No clefts  
 F.T. Uneventful  
 O.C.A. None

*R.A.* At 2½ months  
*Op.* 1. Rot with b-c. 2. c for col.  
 3. Adv with wr with vermilion,  
 then did non-cleft mucosa to cleft  
 side at free border.

*H.P.* Vomer flap at 11 months.  
*S.P.* Island flap pushback at 15  
 months.

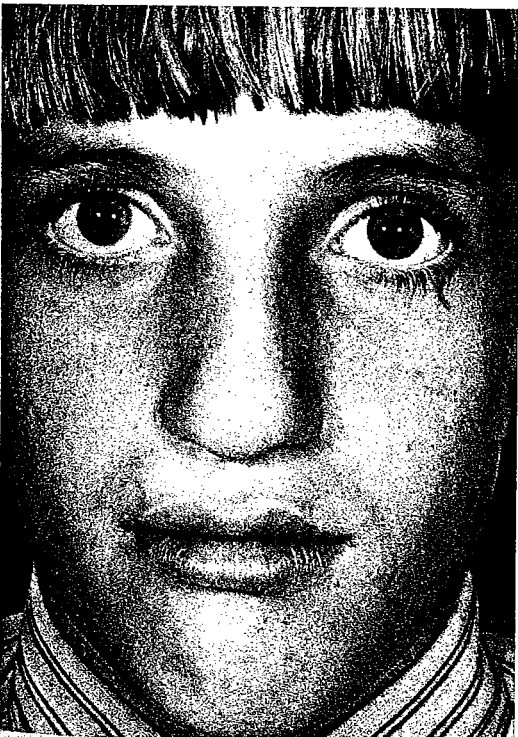
*Revisions.* At 11 years. 1. Normal  
 alar base reduced. 2. Depressed scar  
 excised. 3. V-Y midline tubercle.  
 4. Normal vermilion reduced.



3. 3 months



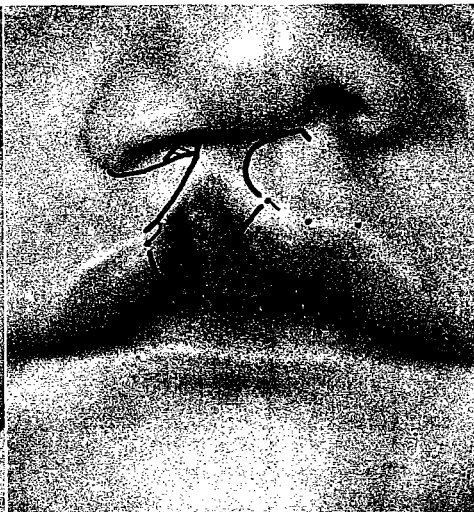
4. 6 years



5. 11 years

*Comment.* Greater deficiency of lip  
 and more distortion of nose than  
 in most incomplete clefts easily  
 corrected with the rotation-ad-  
 vancement action.

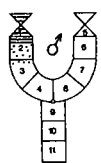
2/3 WAY CLEFT (CASE 35)



1. 3 1/2 months

2. 3 1/2 months

3. 8 months



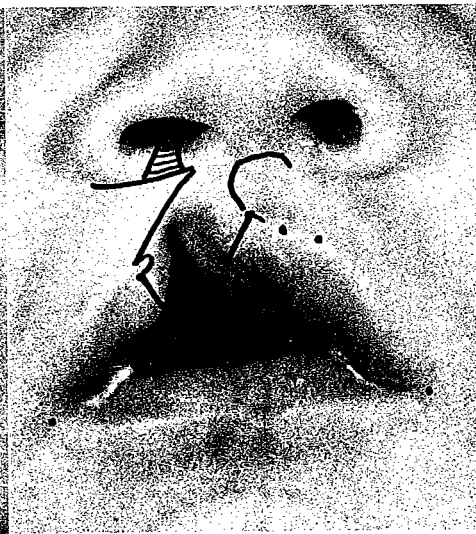
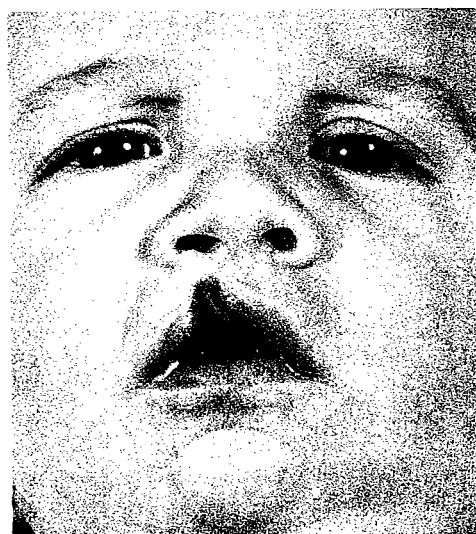
B.D. February 15, 1963  
 F.H. Maternal uncle had cleft palate  
 F.T. Uneventful  
 O.C.A. None

R-A. At 3 1/2 months  
 Op. 1. Rot with b-c. 2. c for col.  
 3. Adv with wr.

Revisions. At 1 year. Vermilion trim.  
 Alar rim excision

Comment. Suggestion of bilateral cleft necessitated mucosal free border revision as a secondary procedure.

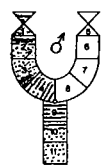
2/3 WAY CLEFT (CASE 36)



1. 4 months

2. 4 months

3. 4 1/2 years



B.D. February 3, 1968  
 F.H. No clefts  
 F.T. Uneventful  
 O.C.A. None

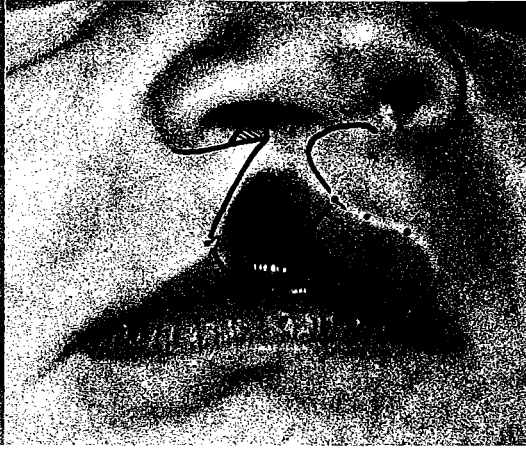
R-A. At 4 months  
 Op. 1. Rot with b-c. 2. c for col.  
 3. Adv with wr.  
 H.P. and S.P. Pushback with island flap at 14 months.

Comment. Use of Simonart's band as the leading point of the advancement flap.

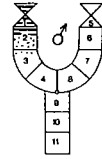
2/3 WAY CLEFT (CASE 37)



1. 3 months



2. 3 months



B.D. July 23, 1964

F.H. No clefts

F.T. Uneventful

O.C.A. None

R-A. At 3 months

Op. 1. Rot with b-c. 2. c for col.

3. Adv with wr.



3. 3 weeks postoperative



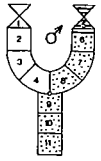
4. 4½ years



5. 4½ years

*Comment.* At least the rotation scar does not seem to limit his lip action.

2/3 WAY CLEFT (CASE 38)



B.D. December 1, 1966  
 F.H. No clefts  
 F.T. Uneventful  
 O.C.A. None

*R-A.* At 2½ months

*Op.* 1. Rot with b-c. 2. c for col.  
 3. Adv with wr. 4. Posterior mucosal flap to cleft side. 5. Alar rim excision.

*H.P. and S.P.* At 1 year pushback with island flap.

*Revisions.* At 6 years. 1. Horizontal full-thickness lip excision to shorten cleft side. 2. Denuded alar base advanced to septum to reduce flare. 3. Alar rim excision.



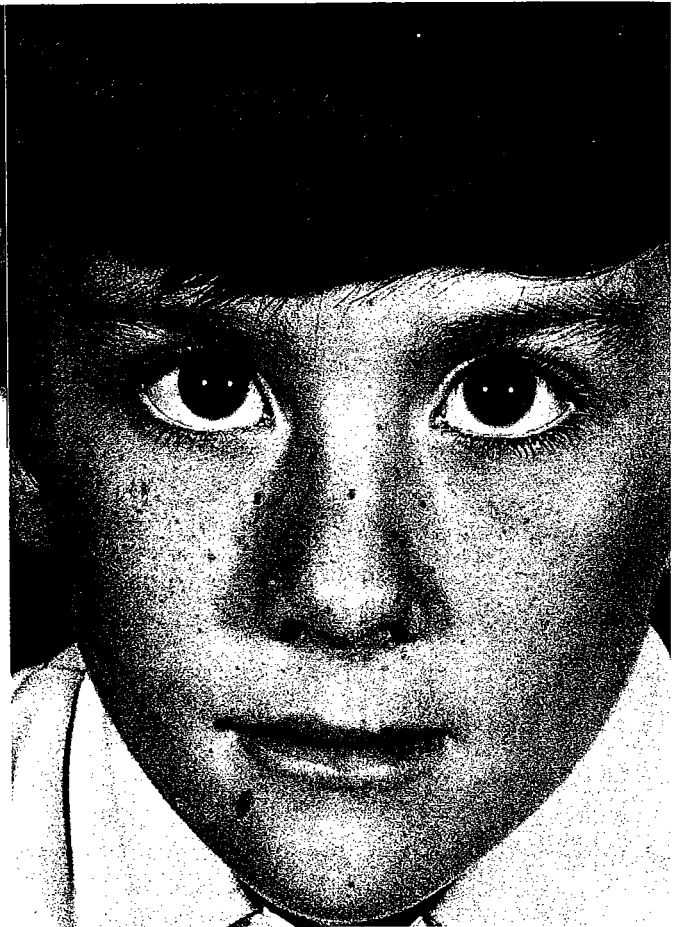
1. 2½ months



2. 2½ months



3. 6 years



4. 6 years

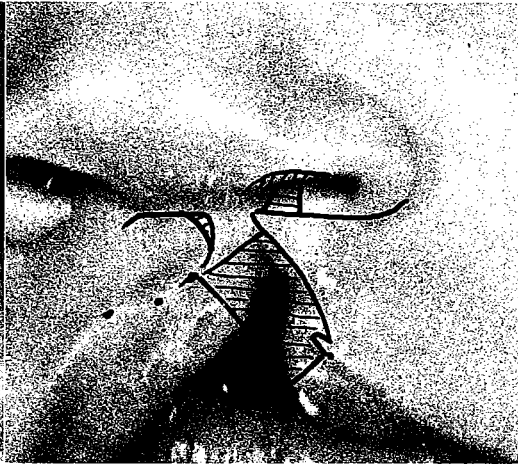
*Comment.* This is a rare example of slightly too much rotation which required full-thickness horizontal elliptical excision of lip at its join along the alar base and nostril sill on the cleft side to lift the bow to near symmetry.



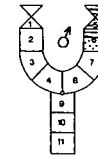
2/3 WAY CLEFT (CASE 39)



1. 3 1/2 months



2. 3 1/2 months



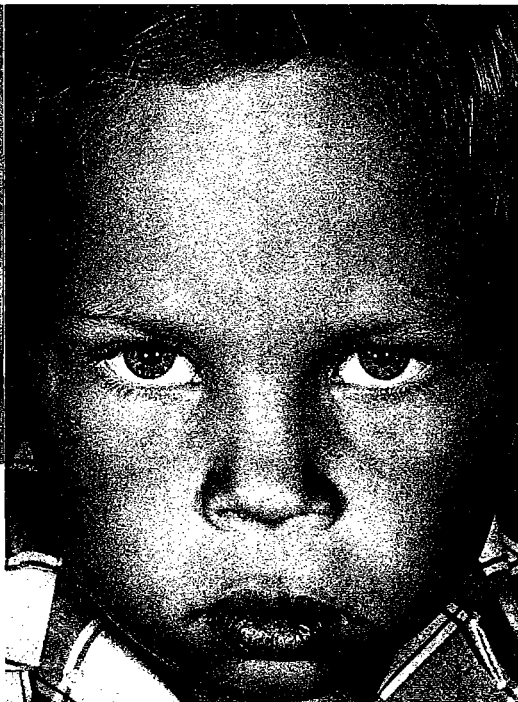
B.D. January 18, 1968  
 F.H. No clefts  
 F.T. Uneventful  
 O.C.A. None

R-A. At 3 1/2 months  
*Op.* 1. Rot with b-c. 2. c for col.  
 3. Nasal floor excision. 4. Adv with  
 wr. 5. Alar rim excision.

*Revision.* At 4 years. 1. V-Y tubercle  
 vermilion. 2. Denude alar base and  
 advance to septum. 3. Normal alar  
 base reduction.



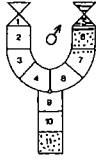
3. 4 months



4. 5 years

*Comment.* Rotation was not carried  
 into the normal side but lip slightly  
 long vertically, which suggests this  
 is natural for this patient.

2/3 WAY CLEFT (CASE 40)



B.D. May 11, 1970  
 F.H. No clefts  
 F.T. Uneventful  
 O.C.A. None

*R.A.* At 4 months

*Op.* 1. Rot with b-c. 2. c for col.  
 3. Adv with wr. 4. Wedge from nostril floor. 5. Crescent from alar margin.

*H.P. and S.P.* At 11 months push-back

*Revisions.* At 11 months. Mucosa free border trim. Alar rim flap to columella.



1. 4 months



2. 4 months



3. 12 months



4. 3 years



5. 3 years

*Comment.* Rotation did not hug columella base quite enough so the upper part of the scar of union is not quite close enough to the nostril sill. Pretty good primary nasal correction with only columella lengthening, alar base positioning and alar rim revisioning.

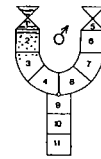
3/4 WAY CLEFT (CASE 41)



1. 3 1/2 months



2. 3 1/2 months

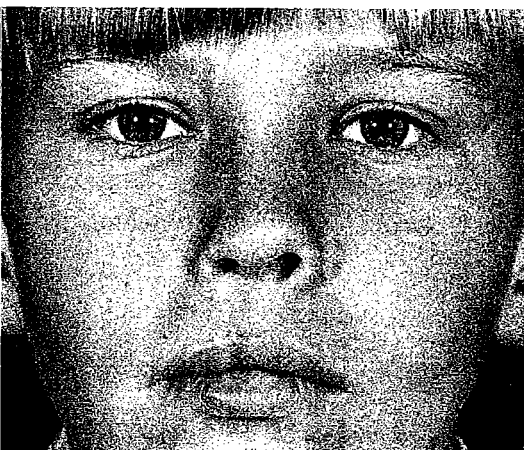


B.D. March 9, 1960  
 F.H. Cousin with cleft lip who did not live  
 F.T. Uneventful  
 O.C.A. None

R-A. At 3 1/2 months  
 Op. R-A without refinements except c for col. No wr flap.

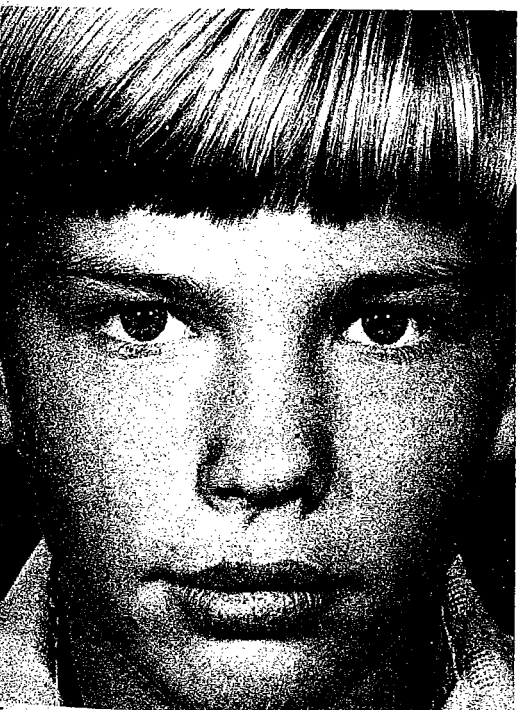


3. 2 years



4. 12 years

*Revisions.* At 9 years. 1. Alar base deepithelialized and advanced. 2. Normal alar base reduced. 3. Z-plasty of vestibule opened airway. 4. Mucocutaneous flap across cleft. At 13 years. 1. Alar lift through high alar margin incision. 2. Anterior septum freed at spine, scored on left side, and moved to midline. 3. Lip muscle approximation. 4. White roll interdigitation. 5. V-Y lip mucosal roll-down.



5. 13 years

*Comment.* A severe incomplete cleft which still requires minor lip and nose revisions.

3/4 WAY CLEFT (CASE 42)



1. 3 months



2. 3 months



3. 6 months



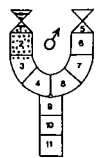
4. 5 years



5. 12 years



6. 12 years



B.D. March 21, 1960  
 F.H. No clefts  
 F.T. Uneventful  
 O.C.A. None

*R-A.* At 3 months  
*Op.* 1. Standard R-A without refinements. 2. Alar crescent excision. 3. Vestibule included in adv flap. 4. Cleft vermilion overlapping interdigitation on non-cleft side.

*Revisions.* At 9 years. 1. Scar to make white roll at mucocutaneous junction. 2. Alar base transposed into nasal floor. 3. Normal alar base reduced. 4. Alar rim crescent excision.

*Comment.* Point of lateral advancement flap had to be taken from up in the nasal vestibule.





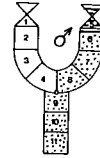
3/4 WAY CLEFT (CASE 43)



1. 2 months



2. 2 months



B.D. January 17, 1962  
 F.H. No clefts  
 F.T. Uneventful  
 O.C.A. None

*R.A.* At 3 months

*Op.* 1. Rot with b-c. 2. c for col.  
 3. Adv with wr. 4. Alar rim exci-  
 sion. Contracture at 3 weeks.  
*H.P.* vomer flap at 10 months.  
*S.P.* Pushback with island flap at 13  
 months.

*Revisions.* Slight vermilion trim at 7  
 months postoperative.

Original deformity and early result  
 published in *Plast. Reconstr. Surg.*  
 33:31, 1964.



3. 3 weeks postoperative



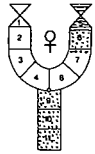
4. 4 months



5. 10 years

*Comment.* Another evidence of early  
 contracture at 3 weeks that  
 smoothed out in several months.  
 This is one of the first "white roll"  
 flaps!

# 3/4 WAY CLEFT (CASE 44)



B.D. August 12, 1968  
F.H. Father's paternal grandmother had CL(P)  
F.T. Uneventful  
O.C.A. None

R-A. At 2½ months.

1. Rot with b-c. 2. c for col. 3. Adv with wr. 4. Posterior mucosal flap to cleft side.

S.P. and S.P. Pushback with island flap at 1 year.

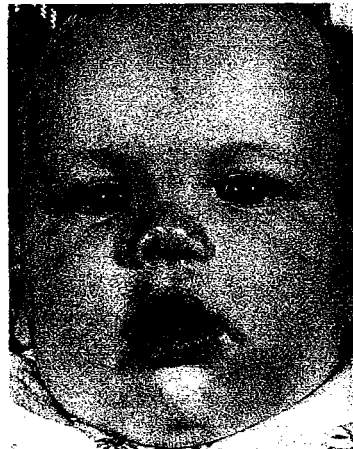
Revisions. At 4 years. 1. Reduction of cleft side vermillion. 2. Revision of lateral lip muscle bulge with filling out of the upper groove. 3. Alar rim denuded and transposed as a flap into the weak area of the nasal tip.



1. 3 weeks



2. 3 weeks



3. 6 months



4. 4½ years

Comment. The repeated need for lateral groove bolstering and revision of cleft side vermillion caused change from posterior mucosal flaps to muscle edge flaps in the primary surgery.



4/5 WAY CLEFT (CASE 45)



1. 6 weeks



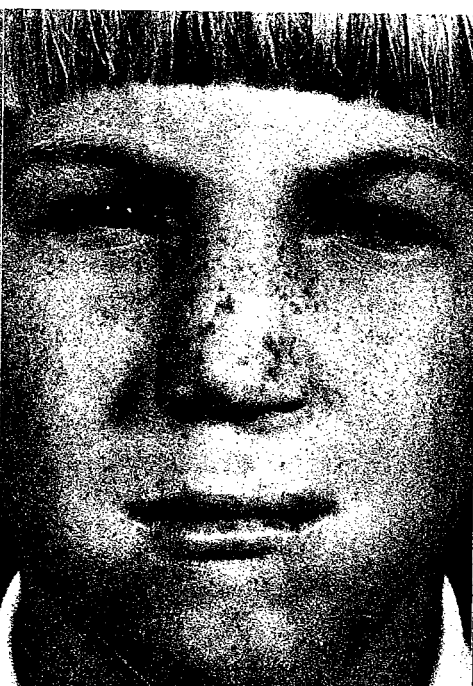
2. 6 weeks



3. 6 months



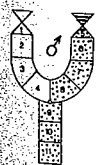
4. 7 years



5. 11 years



6. 13 years



B.D. March 3, 1959  
 F.H. No clefts  
 F.T. Uneventful  
 O.C.A. None

*R-A.* At 6 weeks.  
*Op.* 1. R-A without refinements. 2. Cleft vermilion overlap non-cleft side. 3. Non-cleft mucosa posterior transposed to cleft side.

*S.P.* Closed with Wardill V-Y hamular fracture and Limberg osteotomy.  
*B.G.* At 9½ years split rib bone grafts across and in cleft.

*Revisions.* At 6 months. 1. Alar rim excision. 2. Free border revision. 3. Scar lip excision. At 4 years. 1. Lip scar revision. 2. Vermilion trim. 3. Mucocutaneous junction flap. 4. Normal alar base reduced.

*Comment.* One of the early cases complicated by a groove of muscle deficiency in the lateral element. No refinements, extensions or modern adjuncts were used, and the rotation scar is a little too oblique for a normal philtrum line. No primary nasal tip correction; necessitates revision at 16 years.