Surgical Repair of Bilateral Cleft Lip

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"Surgical repair of double cleft lip is about twice as difficult as in single clefts and the results about half as good!"

- Brown JB , 1947 -

Anatomic components

- 1 .lip clefts, bilateral, complete/ incomplete
- 2. widened alar bases
- 3. a shortened columella
- 4. obtuse nasolabial angle
- 5. hypoplastic prolabium
- 6. vertically short upper lip
- 7. protruded premaxilla
- 8. absence of labio-gingival sulcus
- 9 .absence of orbicularis oris m. in prolabial segment
- 10. absence of philtral structures
- 11. absence of Cupid's bow
- 12. absence of white roll in prolabial segment
- 13. aberrant insertion of lateral orbicularis oris m. into alar-facial bases

Principles of management

- Mulliken JB , 1997

- 1 .creating symmetry of nasolabial units
- 2. regaining optimal function by restoring orbicularis oris m. continuity (myoplastic repair)
- 3. avoiding skin tension (2-stage op. for wide complete defects)
- 4. recreating important physical features
- 5. symmetrically aligning the nasal subunits
- 6. avoiding unnecessary dissection over the maxillary processes and maintaining all necessary mobilization in the supraperiosteal plane
- 7. obtaining the absolutely best surgical results possible in minimal number of procedures

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Techniques of BCL repair

1. Veau II (1931) - Barsky (1950)

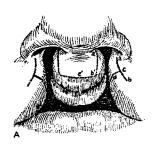


Figure 1-1

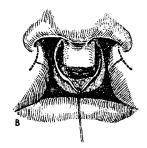


Figure 1-2

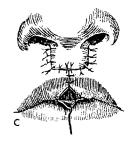


Figure 1-3

2. Veau III (1938)

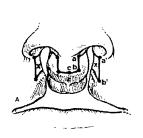


Figure 2-1



Figure 2-2

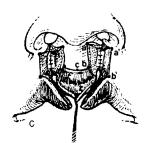


Figure 2-3

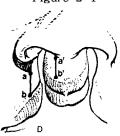


Figure 2-4

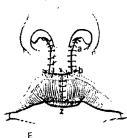


Figure 2-5

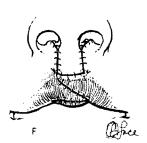


Figure 2-6

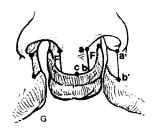


Figure 2-7

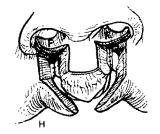


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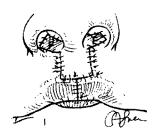


Figure 2-9

3. Manchester (1965)

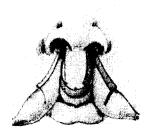


Figure 3-1

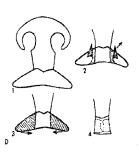


Figure 3-2

4. Black (1984, 1985)

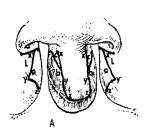


Figure 4-1

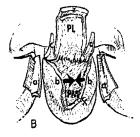


Figure 4-2

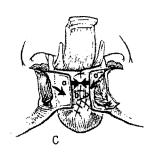


Figure 4-3



Figure 4-4

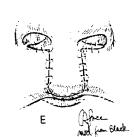


Figure 4-5

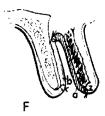


Figure 4-6

5. Bauer-Trusler-Tondra (1959)

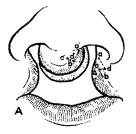


Figure 5-1

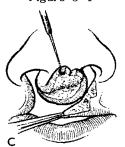


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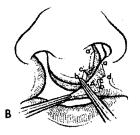


Figure 5-2

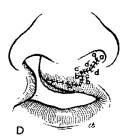


Figure 5-4

6. Tennison (1966)

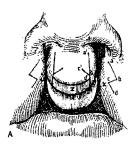


Figure 6-1

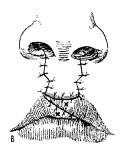
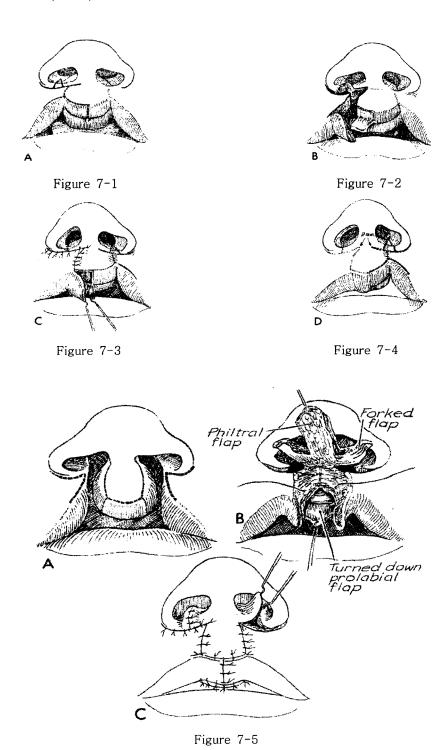


Figure 6-2

7. Millard (1960)



8. Wynn (1960)

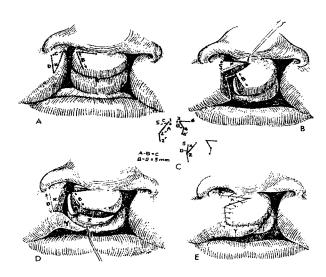


Figure 8

9. Mulliken (1985)

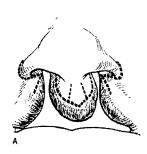


Figure 9-1

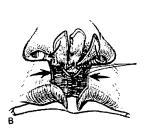


Figure 9-2

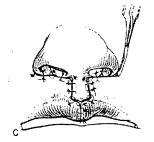


Figure 9-3

10. Noordhoff (1986)

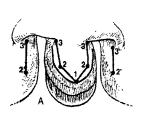


Figure 10-1

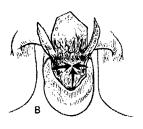


Figure 10-2



Figure 10-3



Figure 10-4



Figure 10-5

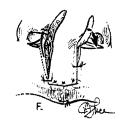


Figure 10-6

11. Min (McComb 2-stage, 1975, 1990)

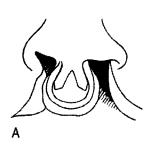


Figure 11-1

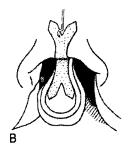


Figure 11-2

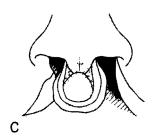


Figure 11-3

12. Skoog (1965)

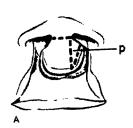


Figure 12-1

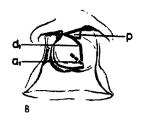


Figure 12-2

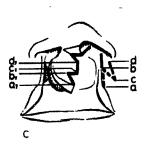


Figure 12-3

13 Clarkson (Primary Abbe flap, 1954)

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