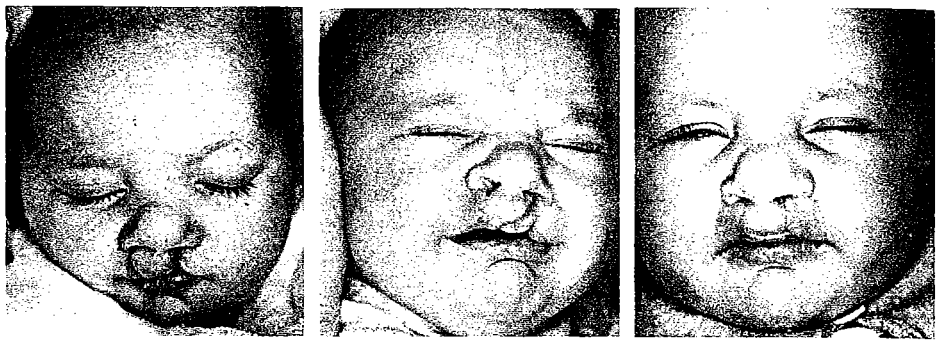
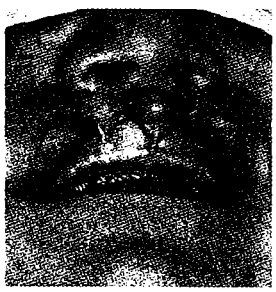
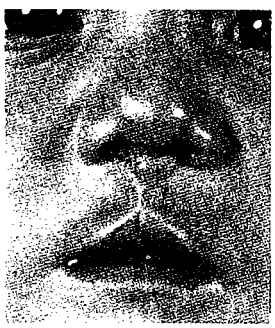
12. *Personal Experience and Gradual Evolution*

A SEVERE bilateral cleft of the lip and palate in a newborn with a protruding premaxilla and a small blob of prolabium sitting out in front of the opened-out nose is indeed a horrifying sight. It transforms a baby into a monster. The shock, anguish and fear suffered by the parents are enough to inspire surgeons to transcend their greatest effort. Yet so many factors are involved and so complicated is the problem that as a student I considered it a triumph just to get the cleft closed. This was the standard approach at Boston's Children's Hospital in the 40's and later with Beverly Douglas at Vanderbilt University Hospital, Nashville. By the time I began to study with Sir Harold Gillies, I had seen enough bilateral postoperative results with the nasal tip dragged into the lip to begin to take sides with the nose. The very spirit of Gillies' clinics stimulated controversy, and, except for fundamental principles, no accepted standard was considered sacred. When Bill Holdsworth let me come on to his cleft lip and palate service, for several months in 1949, I was allowed to do whichever clefts were admitted during that time.

Among other cases, I was guided through a straight-line closure in two stages of a bilateral cleft lip with a protruding premaxilla. The resultant flat nose haunted me even more than the others because I had been directly responsible for it.







When another bilateral lip was admitted, I asked Holdsworth's permission to approach the closure differently. Bill was a good teacher with an easy way about him and he listened to my plan and gave his blessing. I trimmed the vermilion mucosa off the prolabium, shifted it up toward the columella so that there was no pull on the nasal tip and brought the lateral lip elements together beneath it. I remember at the time being surprised at the ease of lip closure but had contemplated the possibility of a small midline Abbe flap for a philtrum later. In 1951 Holdsworth showed the case in his book with a short-term follow-up and this comment:

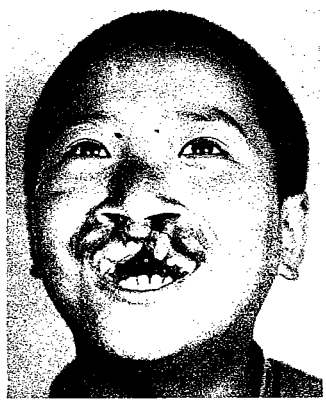
> If the lateral elements of lip be joined in the midline, and the prolabium is set into the columella, depression of the nasal tip can be avoided, but there is a tendency for the lip to be tight and high.

I had occasion to see the little girl five years after my primary operation, and at that point a Gillies cupid's bow procedure was used in an attempt to improve the lip. Actually, all she needed was a small Abbe flap to release the lip and create a central philtrum. Her proud nasal tip had impressed me more than was justified. As I realized later, this incomplete cleft already had some columella, which gave her a better prognosis for a near normal nose even with the prolabium incorporated into the lip.

OFF TO KOREA

My next couple of experiences with primary bilateral clefts represent the two extremes and occurred immediately after my arrival in Korea to join the First U.S. Marine Division early in 1954. One was with a two-month-old baby who had a severely

projecting premaxilla, was unable to suck and was dying of malnutrition. As shown in *Plastic and Reconstructive Surgery,* November 1955, resection of a portion of the vomer allowed incorporation of the prolabium into the lip with bilateral straight-line closure but with depression of the nasal tip. Ten days later the baby was on the breast and gaining weight!



My second severe bilateral cleft in Korea was a 10-year-old native boy with a wide cleft and a small prolabium which inspired me to use an Abbe flap.

Thus my two Korean bilateral cleft cases were at the opposite poles of surgery: premaxillary setback with straight-line lip closure and prolabium into the columella with an Abbe flap. It occurred to me even then that there must be a better way and the answer probably lay somewhere between these extremes. Nevertheless, the potential of a primary Abbe flap deserves and will get a little chapter all its own (Chapter 14).

SUBSEQUENT · EVOLUTION

Back in Miami, Florida, U.S.A., starting in 1956, a two-stage rotation-advancement approach was developed in bilateral incomplete clefts, and when the original columella was of adequate length the results were quite good. After refinements such as muscle approximation, this general approach is advocated today in incomplete clefts with an adequate columella and will be described in detail in Chapter 15.

In asymmetrical bilateral clefts in which one side was complete

thought effort observation

and the other incomplete, the rotation-advancement principle was developed also, but here again the columella was short, at least on the complete side, and so produced unsatisfactory results requiring later surgery.

thought effort observation

In complete bilateral clefts the columella is invariably short. I began, therefore, to incorporate the secondary forked flap into the primary lip plan. First it was used as a *delayed procedure* several months after a one-stage straight-line closure of both clefts. When the importance of *introducing lateral lip muscle and mucosa behind the prolabium* was fully realized, this principle was incorporated. The addition constructed good lips which were not anxious to give up a forked flap. Thus the columella lengthening had to be postponed, and the children reappeared in the clinic year after year with shortchanged noses until I began to see these snubbed noses regularly in my sleep. Finally they pressured me into a *primary forked flap,* but after a modest series the subsequent observations over months and years revealed a better potential nose but a long lip in vertical dimension. When the hazards of this radical approach were matched against the advantages, the method was discontinued. It was then that a different type of delay of the forked flap was incorporated which *banked it* during the primary bilateral lip closure so that it could be used several months later. Again, the despised syndrome of long vertical lip length was eventually revealed, especially in the complete clefts. Thus the final plan which is used today was evolved and will be described in minute detail in Chapters 26, 27, 28, 30 and 31 for incomplete, combined incomplete and complete and complete bilateral clefts of the lip with short columella.

painfully millimeter by millimeter

Before becoming involved in the detail of more standard approaches it is well to study the two extremes of primary handling of complete bilateral clefts, the adhesion and the Abbe flap.