

## Indian Classification of Cleft Lip and Palate

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Nine bits of information specifying whether there is a cleft or not at nine possible sites will give an exact sitewise classification of all types of cleft lip and palate. This can be used for computerised data processing. At each site the absence of cleft is shown as 0, and the presence of cleft as 1.

The first bit shown as P specifies the state of the palate from the uvula to a point just short of the incisive foramen, which is the anterior limit of a palate cleft when the lip and alveolus are not involved.

The second and third bits shown as X indicates whether the cleft has (1), or has not (0), extended from the palate to the alveolus

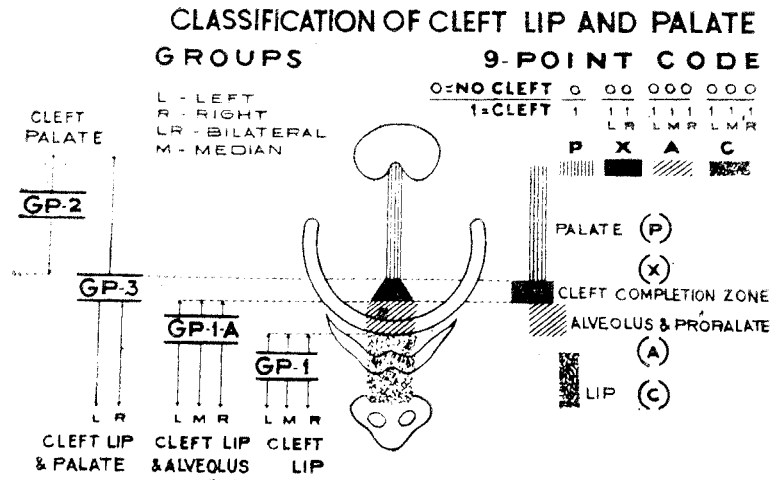
and beyond. This site may be regarded as the cleft completion zone. If it is cleft here, there is always a complete cleft of lip, alveolus and palate. As written at X, left and right places represent left and right sides of the face respectively.

The next 3 bits shown at A represent the left side, the mid line, and the right side respectively, in left to right order.

Three bits at L represent in the same order from left to right, the left side, mid line and right side respectively of the lip. An identification of twelve main types of clefts is given below :

9 Place Code				Description of Deformity	
P	X	A	L	Clinical Statement	and Brief Notation
0	00	000	100	Cleft Lip, left	Gp. 1 (L) ———
0	00	000	010	Cleft Lip, median	Gp. 1 (M) ———
0	00	000	001	Cleft Lip, right	Gp. 1 (R) ———
0	00	000	101	Cleft Lip, left & right	Gp. 1 (LR) ———
0	00	100	100	Cleft Lip & Alveolus left	Gp. 1-A (L) ——— 5
0	00	010	010	Cleft Lip & Alveolus median	Gp. 1-A (M) ——— 6
0	00	001	001	Cleft Lip & Alveolus right	Gp. 1-A (R) ——— 7
0	00	101	101	Cleft Lip & Alveolus left & right	Gp. 1-A (LR) ———
1	00	000	000	Cleft Palate	Gp. 2 ———
1	10	100	100	Cleft Lip and Palate	Gp. 3 (L) ——— 10
1	01	001	001	Cleft Lip and Palate	Gp. 3 (R) ———
1	11	101	101	Cleft Lip and Palate	Gp. 3 (LR) ———

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In the continuously variable spectrum of cleft deformities the following sixteen *intergroup combination* are possible. The 9 place code identifies them clearly and simply. The clinical description has to be supplemented by the brief notation to give full identification.

0	00	100	101	Cleft Lip & Alveolus	Gp. 1-A (L)/1(R)
0	00	001	101	Cleft Lip & Alveolus	Gp. 1-A (R)/1(L)
1	00	000	100	Cleft Lip & Palate	Gp. 2/1(L)
1	00	000	010	—do—	Gp. 2/1(M)
1	00	000	001	—do—	Gp. 2/1(R)
1	00	000	101	—do—	Gp. 2/1(LR)
1	00	100	100	—do—	Gp. 2/1-A(L)
1	00	010	010	—do—	Gp. 2/1-A(M)
1	00	001	001	—do—	Gp. 2/1-A(R)
1	00	101	101	—do—	Gp. 2/1-A(LR)
1	00	100	101	—do—	Gp. 2/1-A(L)/1(R)
1	00	001	101	—do—	Gp. 2/1-A(R)/1(L)
1	01	001	101	—do—	Gp. 3(R)/1(L)
1	10	100	101	—do—	Gp. 3(L)/1(R)
1	10	101	101	—do—	Gp. 3(L)/1-A(R)
1	01	101	101	—do—	Gp. 3(R)/1-A(L)

Large series of lip and palate clefts numbering over 1000 cases are now becoming available from several Indian centres. Classified on a uniform bases they can be checked for possible significant variations in the distribution pattern of cleft types from one region to another. A growing mass of valuable data can be collected by an Indian cleft Lip and Palate Registry for future scientific analyses.

## Repair of the Bilateral Cleft Lip by Millard's Two Stage Procedure

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The surgical treatment of the bilateral cleft lip is still far from satisfactory. Even in well repaired lips the too-large prolabium, the overhanging nasal tip and the absence of a pout mar the cosmetic result. Popular methods of repair are similar to each other and differ only in minor details. The most often used method is probably the simple straight closure of one side followed soon after with the other side. There are many disadvantages with this method: the nasal tip is lifted at an age when scars fare badly, the prolabium stretches to an enormous size due to the pull of the muscle within the lateral elements and the repaired vermilion acts as a muscular stirrups, tilting the premaxilla backwards, and reversing the natural pout of the upper lip.

With a view to circumvent these disadvantages, Millard in 1971 stressed the impor-

tance of muscle suture in the midline and described delayed primary forked flaps to elongate the columella. This method gives far better results than the conventional lip adhesion operation and is recommended. The method is based on the following basic premises:

1. It is technically easier to repair both sides of most bilateral clefts at the same time.
2. Suture of the musculature in the midline reconstitutes the oral sphincter, thus allowing the lip to function normally and resulting in a better cosmetic result.
3. Scars behave better in infancy.
4. It is more expedient to raise the tip of the nose at the same time or soon after lip repair.

**Technique:** (Fig. 1.) The prolabium is divided into three superiorly based flaps (fig.

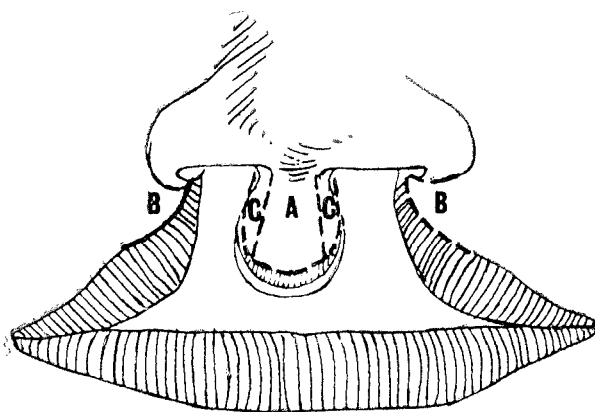
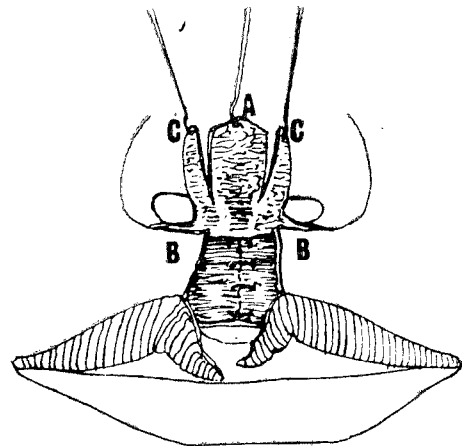


Fig. 1 (a)—The flaps marked out

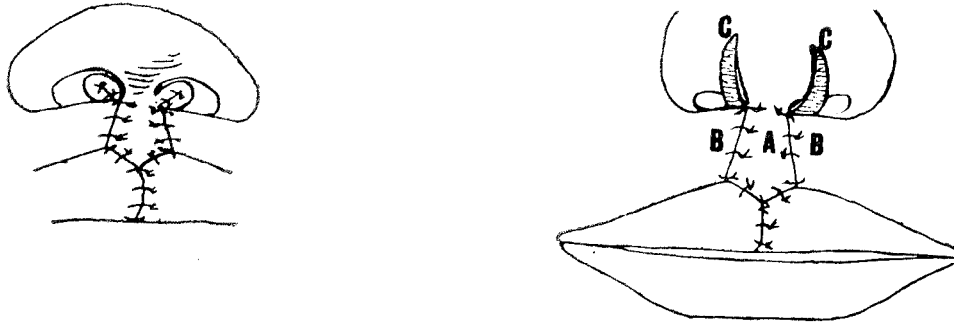


1 (b)—The flaps elevated. Muscle sutured in midline

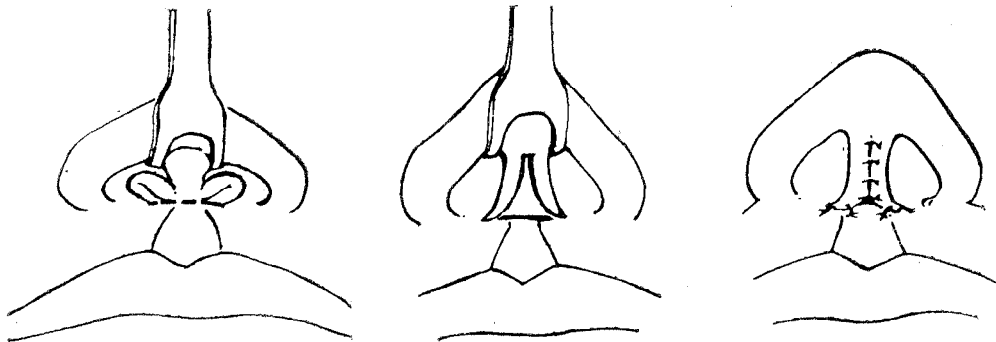
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1a). The size of the central flap A is the size of the philtrum to be and it is important to remember that this is minute in infants. The lateral lip elements are advanced medially as in any other method but the undermining is necessarily more extensive. The muscle layer is separated a little from the skin and mucosa and sutured in the midline in front of the premaxilla (fig. 1b). In most

cases it is possible to do so without undue tension. In the widest cleft it may not be possible to do so. In such cases the muscle is advanced as far medially as possible and sutured to the soft tissue on the anterior aspect of the premaxilla. The skin of the lateral flaps is sutured to the central philtrum flap and the columella flaps are banked inside the nostril (fig. 1 c & d). The vermilion of



1 (c) & (d)—Columella flaps banked inside nostrils



1 (e) (f) & (g)—Columella lengthening at second stage



Fig. 2—Pre and Post operative photographs of the average case  
2 (c)—Photograph taken just prior to columella lengthening. Note the banked flaps inside nostrils

the premaxilla may be used for lining.

Three or four weeks later the columella is separated from the philtrum by a short transverse incision (fig. e). The banked columella flaps are opened out and used to elongate the columella (fig. 1 f & g).

**Summary :**

The common failings of conventional

methods of repair of the bilateral cleft lip are briefly enumerated. Millard's two staged, muscle suture operation overcomes most of these shortcomings and is recommended. The basic premises on which the method is based are mentioned and the method described with the aid of diagrams.

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