Triangle Cleft Lip Repair

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C.W. Tennison

The method of triangular repair most often described is P. Randall's modification (1959) of C.W. Tennison's original technique (1952).
Measurements and Markings

Nadir of cupid’s bow
Peak of cupid’s bow

This point is chosen to create a symmetric cupid’s bow.
Measurements and Markings

The length of the non-cleft side of the lip is our goal.

Measurements and Markings

These two points mark the base of the columella and the alar base.
Measurements and Markings

The end of the white roll is marked.

This point can be moved laterally a short distance if necessary to accommodate the construction of the triangle.

Measurements and Markings

The length of the cleft is measured and will always be shorter than the non-cleft side.
Measurements and Markings

The difference in length between the cleft and non-cleft side of the lip will be the length of the base of the triangle.

These measurements uniquely identify this point around which the triangle is constructed.
Measurements and Markings

This point is selected to define an isosceles triangle.

In practice this is typically constructed as an equilateral triangle.

The length of the sides of the triangle defines the length of the perpendicular back-cut.
Advancement

Double Triangle Variation
Why Triangle?

The rotation advancement technique of Millard has the greatest number of followers and is recognized as a simple method once experience is obtained...

However, a number of surgeons prefer a triangular technique, since it seems simpler to lay out and perform and is less of a “cut as you go” free hand performance.

For some surgeons it seems simpler and easier to teach.

It is also possibly more reliable for those performing and teaching a small number of cases.
Why Triangle?

I like to use a triangular repair for extremely wide clefts.

Case Examples

3 week post-op
Case Examples

3 week post-op

Case Examples

3 week post-op
Case Examples

age 7 (no revision)

Case Examples

age 8 (following minor lip revision)
Case Examples

8 week post-op

Case Examples

age 2 (no revision)
Case Examples

age 7 (no revision)

Case Examples

age 6 (no revision)
Case Examples

age 4 (no revision)

Case Examples

3 week post-op
Case Examples

age 14 months

Case Examples

age 14 months
Case Examples

4 weeks post-op

Case Examples

6 months post-op
Case Examples

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References