
Simplified approach to the design of rhombic flaps



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SURGICAL CHALLENGE

The rhombic transposition flap is an important method used in the repair of facial defects.¹ The design of this flap can be a challenge for the practicing dermatologist, and there are limited articles illustrating a stepwise approach to designing this flap on patients. We propose a simple 4-step method using sterile wooden dowel ends of commonly available cotton swabs or sterile rulers to assist in design and measurement of the Limberg variant of the rhombic flap.

SOLUTION

Step 1 is to create 2 equilateral triangles conjoined on 1 side. This conjoined side is the minor axis of the resultant rhombus and should be parallel to the desired skin tension line within a donor area that has sufficient tissue redundancy. Step 2 is to mark the length of the minor axis onto 2 sterile wooden dowels or rulers. Step 3 is to use 1 of the sterile marked dowels or rulers to extend the minor axis in the desired direction, thus forming 2 continuous, congruent, collinear segments ending in point A (Fig 1). Step 4 is to mark point B of the donor rhombus by using the intersection of the 2 marked dowels or rulers (Fig 2). The first dowel extends from point A. The second dowel extends from 1 of the 2 vertices along the major axis of the original rhombus created in step 1. Finally, the surgeon may choose between these 2 options on the basis of tissue redundancy, tension, and desired lymphatic drainage.



Fig 1. Use of a marked dowel to determine point A.

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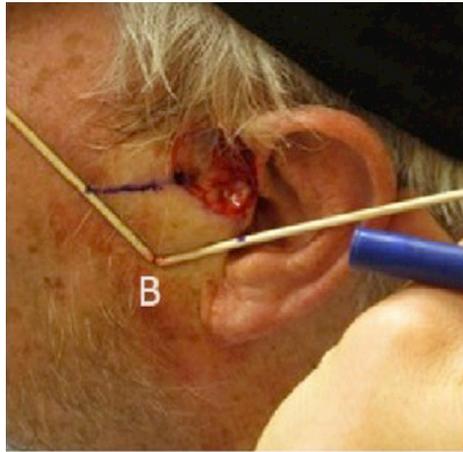


Fig 2. The addition of a second dowel to determine point B.

The use of marked sterile dowels or rulers, as we have outlined, allows rapid, reproducible, and accurate measurement of the Limberg variant of the rhombus flap.

REFERENCE

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