

Short Scar Vertical Mammoplasty Marking Using the Wise Pattern

Gumus et al. [4] recently reported using the Wise pattern to mark for vertical mammoplasty. They have rightly noted that the most difficult aspect of the short scar vertical mammoplasty technique is the lack of a simple pattern applicable for all cases ranging from mastopexy to large reductions. This makes preoperative marking rather difficult to perform.

The vertical scar mammoplasty technique still is met with skepticism. It is a procedure characterized as difficult to learn and variable in outcome [3], requiring a considerable amount of aesthetic sensitivity. Although neophyte plastic surgeons do not lack creativity, they are attracted by well-defined techniques with precise measurements [5]. Difficulty with markings is detracting many from adopting the short vertical scar technique. Nevertheless, attending surgeons at teaching hospitals have the responsibility to develop simple, clear techniques that can be taught to new generations of surgeons. Any straightforward maneuvers are highly beneficial in the training of young surgeons [2].

We previously reported the use of the Wise pattern for preoperative marking of the circumvertical mammoplasty design [1] (Figs. 1–4). It was obvious to us that markings are made much easier to grasp and teach by adopting the Wise pattern familiar almost to all. After transposition of the pattern to the predetermined new nipple location, final circumvertical drawings are made easier, and results more reproducible and predictable.

Gumus et al. [4] were genuine in their attempts to simplify preoperative vertical scar mammoplasty markings. However, after their initial easy step of transposing the periareolar Wise drawing to the upper breast, their subsequent drawing of the inferior skin excision by extension and crossing of lines is rather confusing and defeats their proclaimed aim of simplicity. We find it difficult to understand how the

angle points can be marked at a fixed distance of 7 cm below the new nipple site and be applicable universally to both mastopexy and large reductions.

We believe that the markings we have proposed using the original Wise pattern are much easier to perform and conceptualize. Preoperative markings are made with the patient in the standing position. The initial reference markings are the midsternal line extending into the navel, the midclavicular point (7 to 9 cm from the sternal notch), the existing submammary creases, and the nipple line–breast axis (from the midclavicular point down to the nipple, crossing the submammary crease approximately 10 cm from the midsternal line). The new higher position of the nipple is transposed onto the breast axis at or just below the level of the existing inframammary fold. This results in an average distance of 18 to 22 cm between the suprasternal notch and the upper diameter of the areola. This distance varies with the height of the patient and the desired breast size after reduction.

A temporary periareolar line is drawn by transposing a standard Wise pattern. The length of this initial periareolar drawing is constant according to the mathematical model, in which this line length equals the projected areolar circumference: $2 \times \pi [r] \times r$ (r = areolar radius) (the line is 14–16 cm corresponding to an areola diameter of 4–5 cm). The drawing then is modified by symmetric medial and lateral expansions, resulting in a new periareolar drawing encompassing two times more areolar skin excision than the standard Wise drawing. The length of the new periareolar incision line drawn as an arc may reach 30 to 32 cm, corresponding to a circle 10 cm in diameter, twice the size of a normal areola. We do not advise making the length of this line longer. Otherwise, periareolar wrinkling after application of the round block suture may become exaggerated.

As with the drawing of the medial and lateral vertical limbs of the standard Wise pattern for the classical inverted T design, the location of the medial and lateral ends of the arc can be easily estimated.

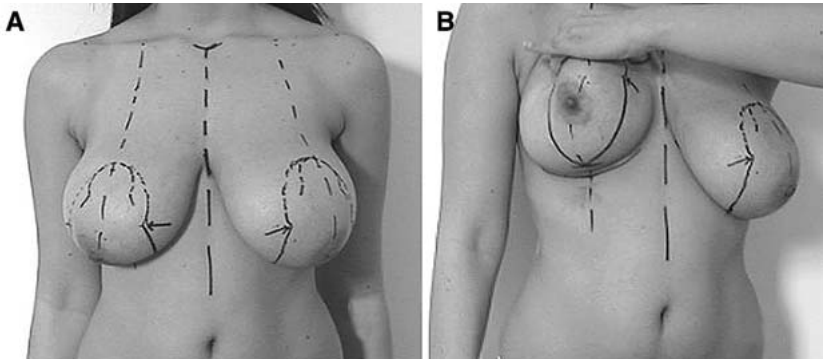


Fig. 1. Preoperative markings using the standard Wise patten. (A) Areolar cutout drawn at a predetermined position with the Wise pattern. A wider arc then is drawn symmetrically along the breast meridian. (B) Inferior markings are easily made. Medial and lateral markings meet at the breast meridian about 3 cm caudal to the existing inframammary fold.

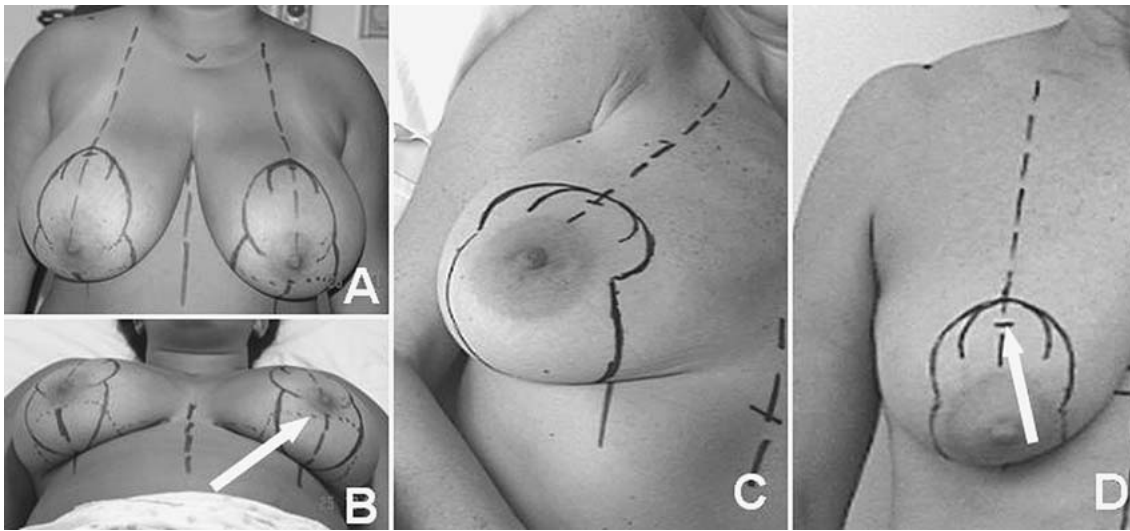


Fig. 2. (A,B) Markings for reduction mammoplasty. Inferior glandular resection is outlined (arrow). (C,D) Markings for mastopexy. The location of the transposed inframammary fold to the anterior breast surface is indicated by the arrow.

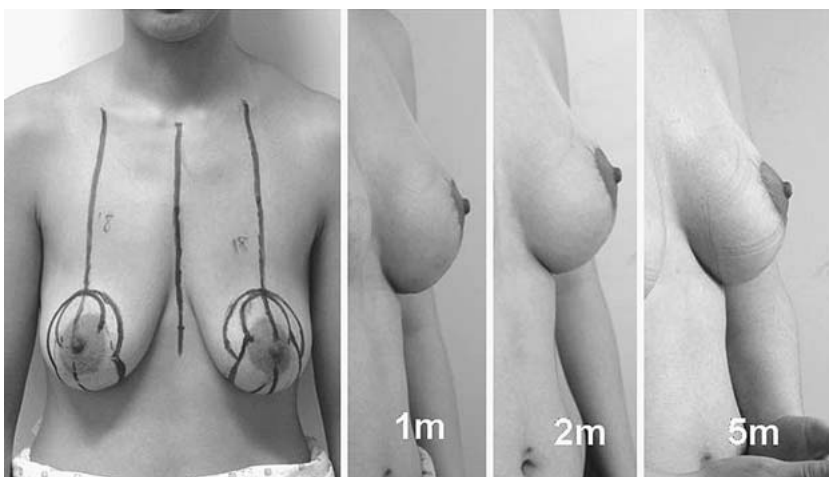


Fig. 3. Superior areolar border situated 18 cm from the suprasternal notch. Results at 1, 2, and 5 m.

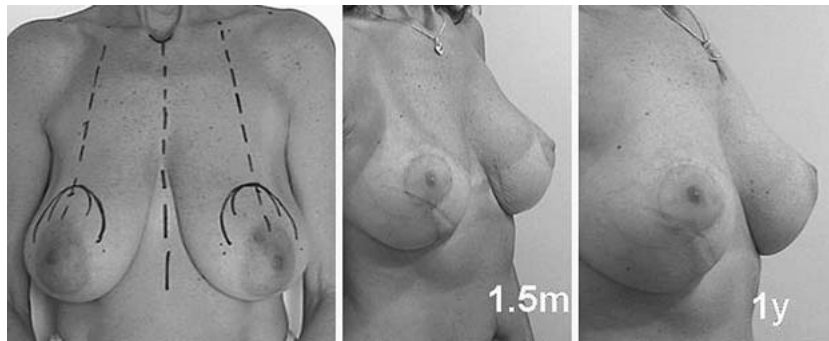


Fig. 4. Stable result with good nipple–areola position at 1 year.

The location of these points depends on the degree of nipple–areola complex elevation and glandular resection required. In general, the arc will correspond to two-thirds to three-fourths of a circle. On the average, the medial portion of this line is 9 to 11 cm from the midline, the same as with Binelli's marking. This arc can easily be drawn freehand, or it can be made with the aid of a flexible wire 30 to 32 cm long bent into the desired form of an arc. Next, vertical lines are drawn caudally from the lateral and medial ends of the periareolar drawing, then curved toward the breast axis line, where they meet at about two fingers (3 cm) above the existing inframammary crease.

With regard to the problems encountered committing to the areolar cutout in predetermined preoperative markings, as rightfully noted by Nahai and Nahai [6], one is limited later and even unable to adjust the nipple position if necessary. This in fact is a theoretical objection in constant debate among the proponents of definite predetermined preoperative markings, which are easy to teach and to reproduce, and those who consider aesthetic sensitivity and artistic creation impossible to achieve by well-defined techniques with precise measurements. Putting things in the right perspective, there is general agreement that nipple position from the suprasternal notch is at a rather fixed distance, and that the nipple should be at the apex of the breast glandular cone.

We believe that the problems encountered in nipple position are not because of the predetermined distance from the suprasternal notch, but rather because of inability to position the nipple at the apex of the new breast cone at the end of surgery, because of later glandular pseudoptosis inherent to the inferior pedicle techniques, or because of inadequate inferior glandular resection and medial and lateral pillar fixation in the superior pedicle techniques. Any intraoperative adjustments to the nipple–areola position should therefore be made not by readjustment of the skin cutout, but rather by glandular resection and reshaping.

We believe that exact preoperative markings are critical for teaching neophyte plastic surgeons and essential to achieving consistent and reproducible results. After all, not all plastic surgeons are artists

capable of thoughtful intraoperative improvisations and modifications in the skin cutout. Some of us still have difficulty grasping the freehand and complex markings associated with the various modifications of vertical scar mammoplasty. Adapting the standard Wise pattern to short scar vertical mammoplasty with easy, fixed preoperative markings definitely will aid in the widespread acceptance and adoption of this technique. The authors are certainly to be commended in that regard. However, we believe that our previously published guidelines for preoperative markings using the Wise pattern are easier to conceptualize and apply.

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