

Fig. 1. Internal nasal valve schematic. The internal nasal valve is bordered by the upper lateral cartilage (a), septum (b), and head of the inferior turbinate (c). Note the increased cross-sectional area of the internal valve with a lateralized turbinate (A₂) compared with a nonlateralized turbinate (A₁).

large and frequently cited prospective evaluation of several inferior turbinate reduction techniques, including submucosal resection with and without lateralization. An improved (decreased) standardized symptom score was found in the lateralized group that did not reach statistical significance (10 ± 1.68 versus 12 ± 1.79 ; $p > 0.05$). Nonetheless, this trend was found to persist through the last follow-up assessment at 6 years, and the authors concluded lateralization to be an effective adjunct.

Of note, in the study by Passali et al., surgery was performed under a local anesthetic. Typically not performed without general anesthesia in the United States, lateralization can involve a considerable amount of force and audible cracking. The studies from Aksoy et al. and Marquez et al. may have been able to achieve more convincing results because of the patients having been fully anesthetized. Conceptually, by creating space between the medial aspect of the inferior turbinate and septum, and by increasing the cross-sectional area of the internal nasal valve, one can imagine how lateralization could result in increased airflow and symptomatic changes (Fig. 1).

Is there any risk associated with lateralization? In contrast to the superior and middle turbinates, the inferior turbinate invariably attaches to the sturdy and benign structure that is the medial maxillary sinus wall. In 2011, Jung and Gray⁴ presented a case of silent sinus syndrome attributed to a prior lateralization procedure. This pathophysiology was not supported on a computed tomographic imaging study of 23 patients from Lee et al.⁵ that showed no significant changes in ostiomeatal complex anatomy following lateralization.

Inferior turbinate lateralization results in durable and favorable anatomical changes and rhinometric improvements. Given the potential for symptomatic benefit, its technical simplicity, and arguably nonexistent complication profile, providers should have a low threshold for performing this technique in patients undergoing surgery for nasal obstruction.

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William J. Moss, M.D.

Aaron J. Lemieux, B.S.

Thomas H. Alexander, M.D.

Department of Surgery
Division of Otolaryngology–Head and Neck Surgery
University of California, San Diego
San Diego, Calif.

Correspondence to Dr. Moss
Department of Otolaryngology–Head and Neck Surgery
University of California, San Diego
200 West Arbor Drive
San Diego, Calif. 92103
billy.moss85@gmail.com

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REFERENCES

1. Aksoy F, Yildirim YS, Veyseller B, Ozturan O, Demirhan H. Midterm outcomes of outfracture of the inferior turbinate. *Otolaryngol Head Neck Surg.* 2010;143:579–584.
2. Marquez F, Cenjor C, Gutierrez R, Sanabria J. Multiple submucosal out-fracture of the inferior turbinates: Evaluation of the results by acoustic rhinometry. *Am J Rhinol.* 1996;10:387–391.
3. Passali D, Passali FM, Damiani V, Passali GC, Bellussi L. Treatment of inferior turbinate hypertrophy: A randomized clinical trial. *Ann Otol Rhinol Laryngol.* 2003;112:683–688.
4. Jung D, Gray ST. Silent sinus syndrome after lateral fracture of the inferior turbinate. *Otolaryngol Head Neck Surg.* 2012;146:863–864.
5. Lee KC, Lee SS, Lee JK, Lee SH. Medial fracturing of the inferior turbinate: Effect on the osteomeatal unit and uncinate process. *Eur Arch Otorhinolaryngol.* 2009;266:857–861.

Line-of-Nines Guide to Define Points B and C in Mastopexy and Reduction Mammoplasty

Sir:

In mastopexy and reduction mammoplasty, three points are generally marked before surgery: the new nipple-areola complex position (point A) and the initial skin resection sites (points B and C).¹ Determining the splay angle of the vertical limbs is the most difficult part of these markings in our experience. To set the distance between points B and C, mechanical aids,² average values (approximately 10 to 11 cm),³ angular measurements (45 to 180 degrees),⁴ and freehand methods^{1,5} have been invoked. Presented in this communication is a highly

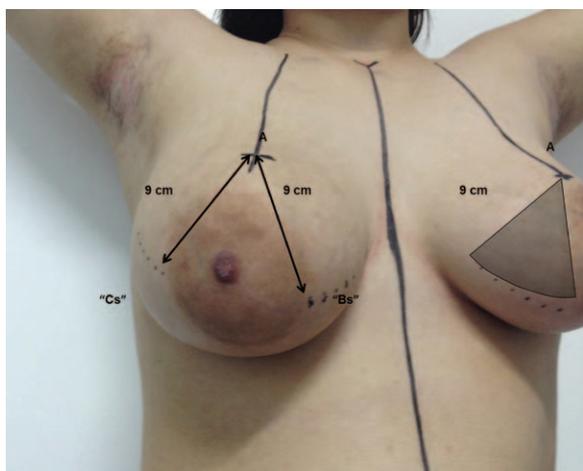


Fig. 1. After point A is marked, a series of points equidistant from point A are marked medially and laterally as straight lines in the caudal direction. This allows several medially and laterally placed potential sites for points B and C, respectively (drawn on the right breast). The latter form the arc of the circle, with a 9-cm radius and point A at the center (drawn on the left breast).

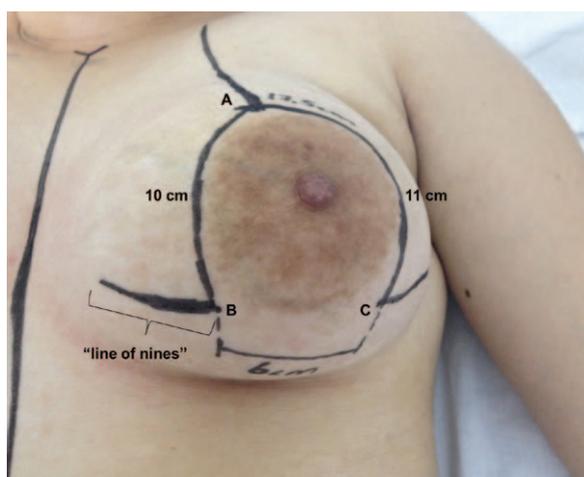


Fig. 2. Vertical limbs (A to B and A to C) may need to be drawn as curves, especially in patients with exceptionally large areolas. Of note, the distance between B and C may be varied to spare skin. As above, this distance was 6 cm, with A to B at 10 cm and A to C at 11 cm. The line-of-nines segment medial to point B is indicated.

simplified approach applicable to any breast to avoid excessive skin deepithelialization between points B and C. This method has served well in teaching breast reduction and pexy techniques to our residents.

Point A is first marked on the breast skin at the projection of the inframammary fold. A series of points equidistant from point A are then marked medially and laterally as straight lines in the caudal direction, with the aid of a flexible tapeline. Each line (A to B and A to C) is generally 9 cm, corresponding to the sum

of the areolar diameter (4 cm) and the vertical scar (5 cm). The result is a circular arc, which we refer to as the “line of nines,” representing several potential distances between points B and C and angle $B\hat{A}C$ (Fig. 1).

A conservative distance is then chosen between points B and C, with the breast meridian at the center. This distance may vary, depending on the extent of skin removal needed. If in doubt, the smallest possible distance is the safest. We consider a range of 4 to 8 cm to be versatile and safe.

The vertical limbs are then drawn outside the areolar diameter. Although the A-to-B and A-to-C points are marked as straight lines, the actual vertical limbs are not necessarily straight, especially in patients with exceptionally large areolas. In such cases, they are drawn as curves and may exceed 9 cm (Fig. 2). At the start of surgery, it is best to tattoo a few points over the line-of-nines markings with sterile 4% methylene blue. When the moment arrives to tailor the skin brassiere, a two-finger pinch maneuver may then be used to test various B-to-C distances by connecting tattooed points. An appropriate B-to-C distance is one that delivers a satisfactory breast shape. These points are sutured together, enabling easy and precise excision or deepithelialization as required.

Even though lengths of vertical limbs may differ, the straight A-to-B and A-to-C distances are always fixed at 9 cm. Thus, skin adjustments to achieve a 9-cm vertical incision at the close of surgery are facilitated—beginning at point A and ending at the junction of points B and C.

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Luís Fernando Ungarelli, M.D.

Jayme Adriano Farina, Jr., M.D., Ph.D.

Division of Plastic Surgery
Department of Surgery and Anatomy
Ribeirão Preto Medical School
University of São Paulo
São Paulo, Brazil

Correspondence to Dr. Ungarelli
Department of Surgery and Anatomy
Division of Plastic Surgery
Ribeirão Preto Medical School
University of São Paulo
Avenida Norma Valerio Correa
571 casa 85

Ribeirão Preto, São Paulo 14021-593, Brazil
lfungarelli@hotmail.com

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REFERENCES

1. Kreithen J, Caffee H, Rosenberg J, et al. A comparison of the LeJour and Wise pattern methods of breast reduction. *Ann Plast Surg.* 2005;54:236–241.

2. Barbosa MV, Nahas FX, Neto MA, Ferreira LM. Keyhole pattern for preoperative marking for reduction mammoplasty. *Can J Plast Surg*. 2010;18:130–134.
3. Hidalgo DA. Improving safety and aesthetic results in inverted T scar breast reduction. *Plast Reconstr Surg*. 2009;103:874–886.
4. McCulley SJ, Schaverien MV. Superior and superomedial pedicle wise-pattern reduction mammoplasty: Maximizing cosmesis and minimizing complications. *Ann Plast Surg*. 2009;63:128–134.
5. Modolin M, Cintra W Jr, Silva MM, Ribeiro L, Gemperli R, Ferreira MC. Mammoplasty with inferior pedicle flap after massive weight loss. *Aesthetic Plast Surg*. 2010;34:596–602.

For the First Time, a National Health Authority Provides Official Recommendations for Autologous Fat Grafting in the Breast

Sir:

Numerous publications and literature reviews have focused on the controversy surrounding the risks related to the transfer of adipose tissue to the breast.^{1–4} In recent years, many professional societies have addressed this problematic procedure and proposed recommendations for performing it, first in 2009 by the American Society of Plastic Surgeons, then in 2011 by the Société française de Chirurgie Plastique Reconstructrice et Esthétique, and then in 2012 by the British Association of Aesthetic Plastic Surgeons. Depending on the country, the indications, preoperative assessment, and postoperative follow-up differ. However, this is the first instance of a national health authority issuing official recommendations. In France in January of 2015, the Haute Autorité de Santé published official recommendations based on the opinions of a group of experts.¹ The Haute Autorité de Santé⁵ issued several conclusions from the analysis of the scientific data available in the literature, including the finding that autologous fat grafting is an effective, simple method that causes few complications. Also, the risk of occurrence or recurrence of breast cancer following autologous fat grafting is not supported by the available studies in the literature. We report in this communication the contraindications, preoperative assessment protocol, and postoperative follow-up, depending on the surgical indication.

First, regarding the indications for cosmetic breast surgery or treatment of breast deformities, the contraindications include unreasonable expectations of patients (major breast augmentation); insufficient reserves of fat; weight instability; familial, histologic, genetic (*BRCA1* and *BRCA2*, *PTEN*, and *P53*), or medical risk factors; and an evolutive breast cancer abnormality on preoperative radiologic evaluation (American College of Radiology Appropriateness Criteria rating of 3, 4, 5, or 6). Preoperative assessment included the following: for patients younger than 30 years, breast ultrasound; for patients aged 30 to 40 years, a mammogram (one incident) and breast ultrasound; for patients older than 40 years, a mammogram (two incidences) and breast ultrasound; and for patients older than 50 years, an organized screening for breast cancer. The postoperative follow-up is to be

performed at 1 year and must be identical to the preoperative assessment.

Second, regarding reconstruction following breast-conserving surgery, the contraindications include no local remission on the clinical or radiologic examination (American College of Radiology Appropriateness Criteria rating of 3, 4, 5, or 6); metastatic disease; incomplete tumor resection; less than 2 years since local treatment; and incomplete conservative treatments whether surgical, radiologic, or medical (hormone therapy) treatment.

The preoperative examination must be performed 4 to 6 months before surgery and include a mammogram, breast and axillary ultrasound, and magnetic resonance imaging. Postoperative monitoring should be performed at 1 year and include mammography and breast and axillary ultrasound. After 1 year, the patient is monitored by the conventional follow-up.

Third, regarding the indications for breast reconstruction after mastectomy, the contraindications include local recurrence detected on clinical examination and/or abnormal radiologic evaluation of the contralateral breast (American College of Radiology Appropriateness Criteria rating of 3, 4, 5, or 6); metastatic disease; and less than 2 years after local treatment when there is a high risk of local neoplastic recurrence (inflammatory breast, high-grade in situ carcinoma or sarcoma in a young woman).

There is no systematic preoperative evaluation after total mastectomy except the typical annual assessment. The postoperative follow-up should be performed at 1 year and should include a clinical examination and bilateral breast ultrasound (the reconstructed breast and the contralateral breast).

Fourth, additional points of the report include the following:

- The Haute Autorité de Santé considers that it is not prudent to perform this procedure for symmetrization of the contralateral breast after breast cancer surgery outside of a research protocol.
- Radiologists are qualified to manage patients after autologous fat grafting following training in breast surgery imaging.
- Autologous fat grafting of the breast, whether reconstructive or aesthetic, may be performed by qualified plastic surgeons. Gynecologists can perform autologous fat grafting in breast reconstruction.
- All patients should give informed consent regarding the lack of evidence-based scientific data on the safety of autologous fat grafting. The future aim is to offer standardized and centralized information amassed by a single organization.
- A national registry to track patients is required.

It is noteworthy that the scientific value of these recommendations is relatively limited because they are