

Modified medial thigh lift: A novel approach to prevent labial distortion

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ABSTRACT

Contour deformities of the medial thigh areas are a concern for individuals seeking body contouring. Despite patients' concerns, plastic surgeons were reluctant to perform previous medial thigh lift surgery due to postoperative complications and poor outcomes. Since its description, although many improvements have been made to reduce postoperative complications and increase the predictability of the outcome of the medial thigh lift technique, vulvar distortion has not been completely prevented yet.

Medial thigh lift procedures were performed in three female patients presenting with third-degree ptosis utilizing a modified incision design. The level of the intersection points was meticulously determined, and the incisions were positioned within the natural inguinal and perineal creases to preserve anatomical continuity. This technique was designed to maintain the native vulvar contour and minimize distortion of the vulvar anatomy.

No evidence of vulvar distortion was observed throughout the postoperative follow-up period.

Keywords: Body contouring, labial distortion, medial thigh lift, thighplasty.

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Introduction

Medial thigh lift, also known as medial thighplasty, is a procedure of thigh rejuvenation that has been initially described by Lewis [1,2]. Since the first description of this technique, medial thigh lift has often been requested to improve appearance and function of medial thigh deformities, following massive weight loss or aging. However, Lewis' technique did not gain widespread acceptance at first because

of the postoperative problems such as widening of the scar, scar migration, early recurrence of ptosis, and vulvar distortion. Since then, many improvements have been made in order to increase the predictability of outcome and to reduce the rate of postoperative complications; such as anchoring the superficial fascia to Colles' fascia to prevent recurrence of the cutaneous ptosis and to limit the risks of vulvar distortion, using liposuction as an adjunctive technique to reduce postoperative seromas and lymphedemas [3-5]. In this study, we aimed to prevent vulvar distortion that may develop because of medial thigh lift, by using selected anatomical landmarks to preserve the natural appearance of the vulva.

Cases and Surgical Technique

Three female patients aged 46, 52 and 58 years were admitted to our clinic with aesthetic concerns involving the inner thighs and impaired ambulation secondary to friction between the medial thighs. All patients exhibited horizontal-vertical skin laxity and localized excess adipose tissue and were treated using the technique described below.

The patients were followed up with regular dress, recovered uneventfully and achieved aesthetically acceptable results.

Markings were made in the operation theatre while the patient is standing in front of the surgeon with abducted legs. The superior line of the horizontal ellipse is drawn along the inguinal crease. The inferior line of the

resection ellipse was determined by pulling skin excess both medially and upwardly. While the lateral apex of the ellipse may reach beyond the half of the thigh, the medial apex goes up to the gluteal crease, however, it should not cross it. The amount of skin removed horizontally is approximately determined, because the extent of the horizontal resection cannot be calculated prior to surgery due to the excess skin produced by vertical resection in the groin area.

The vertical line that will be the center of the marked vertical wedge estimates the final scar position is drawn along the medial surface of the thigh. This ensures that the scar is well hidden inside the thighs. The extent of the vertical wedge is calculated by pinch test, and the vertical wedge is drawn as in Figure 1a and 2a.

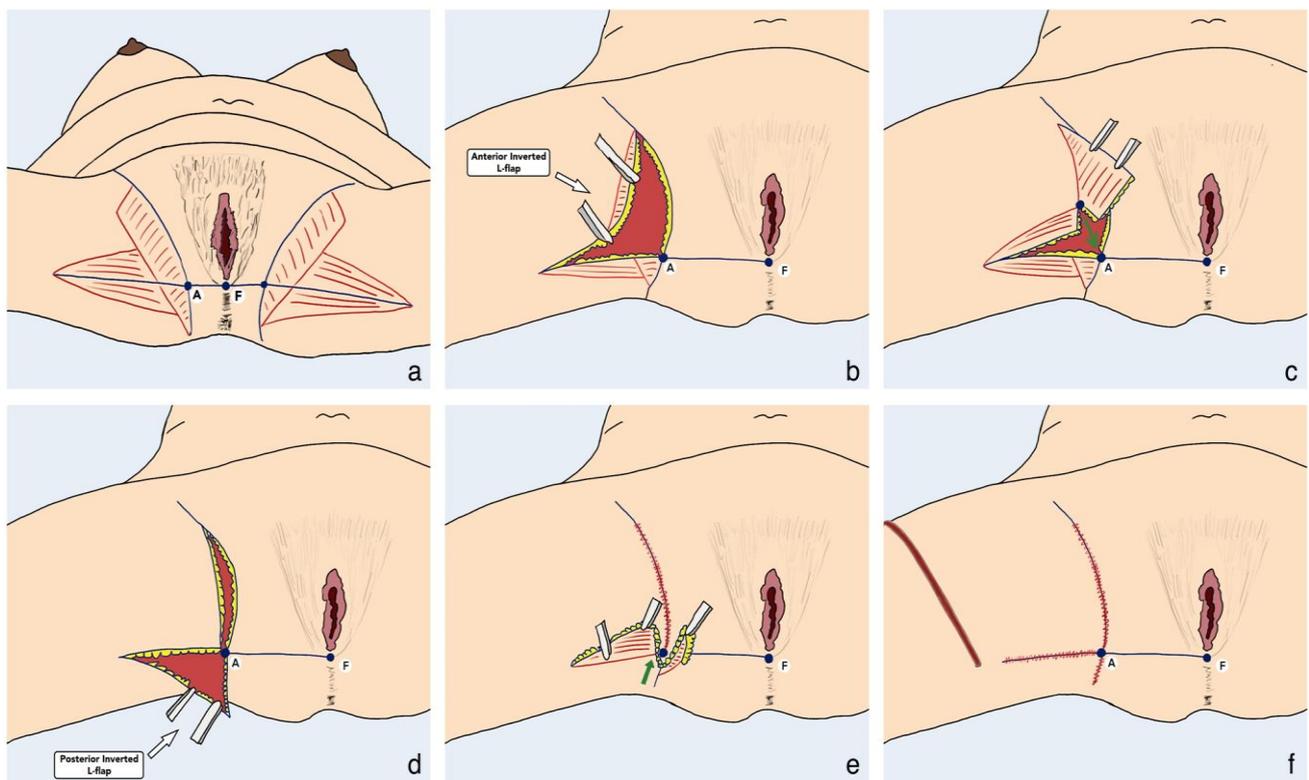


Figure 1. a) Schematic representation of our technique. It is possible to lengthen the vertical scar depending on the deformity of the patient. b) Schematic representation of the anteriorly placed inverted L shaped flap dissection. c) Schematic representation of the anterior inverted L-shaped flap pulled medially and upwardly. d) Schematic representation of the appearance of thigh after resection of the horizontal ellipse and dissected posterior inverted L-shaped flap. e) Schematic representation of the posterior inverted L-shaped flap pulled anteriorly and upwardly. f) Schematic representation of T-shaped closure. Note the placement of haemovac drain.

Then, the horizontal line passing through the Fourchette (anatomically defined as the lowest part of the internal folds of the vulva) (point F) is drawn while the patient is in the frog-leg position to define the intersection point A on the inguinal crease [6]. This determines both the apex and the level of the T-shaped incision, which prevents the stretching force causing labial distortion (Figure 1a, 2a).

After the liposuction of vertical wedge area just above the medial thigh middle adhesion zone, starting with the incision to be made at the most superior of the inguinal fold, proceed along the line until the previously drawn line in the inguinal fold ends. Next, one should proceed along the midline of the vertical wedge from the Intersection point A and complete the incision at the lower apex of the vertical wedge. Anteriorly placed inverted L shaped flap dissection commences through the superficial fascia, undermining only the skin, to preserve all the fat in this area and avoid the lymphatic network (Figure 1b). The dissection continues until the inferior markings of the horizontal ellipse and anterior markings of the vertical wedge are reached. The anterior inverted L-shaped flap is pulled medially and upwardly (Figure 1c). Horizontal incision is made at the intersection point A and the flap edge is attached to this point with a staple. In this way, it is checked whether the flap advancement is sufficient. After all anchoring sutures have been placed, the horizontal ellipse is resected and closed at the intersection point A using the segmental resection closure technique (Figure 1d). An incision is made along the inferior line of the horizontal ellipse and a new posteriorly placed inverted L-shaped flap is created (Figure 1d) by dissecting the posterior part of the vertical wedge up to the posterior mark of the horizontal ellipse. Flap is pulled anteriorly and upwardly (Figure 1e). Horizontal incision is

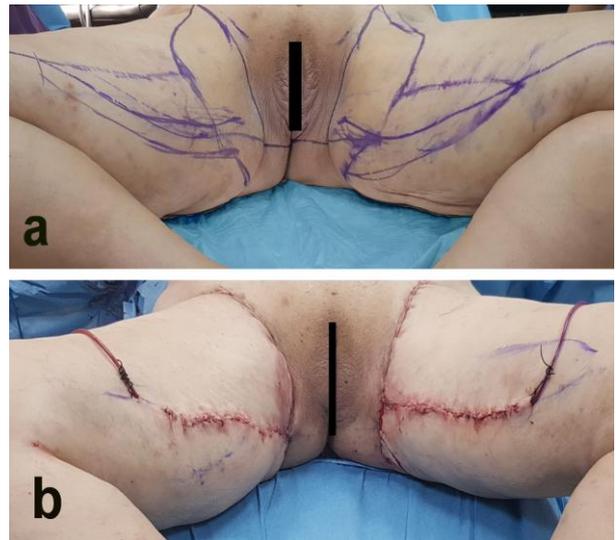


Figure 2. a) Preoperative markings of the patient. b) Intraoperative final appearance of the patient after T-shaped medial thigh lift.

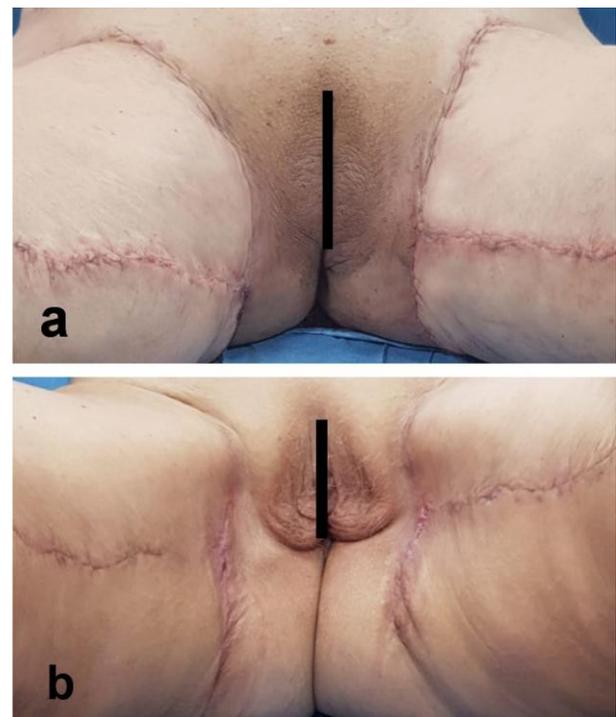


Figure 3 a,b. Postoperative appearances of the patients. Note that there is no vulvar distortion.

made at the intersection point A and the flap edge is attached to this point with a staple. Resections are performed and a temporary T-shaped closure is made using staples after confirming the amount of horizontal and vertical excess. A haemovac drain is placed.

Two-layer closure is made after the removal of the staples (Figure 1f, 2b). Steristrips (Omnistrip, Paul Hartmann AG, Germany) and elastoplasts (Tensoplast, BSN Medical GmbH, Germany) are applied. A standard elastic garment is worn in the operating theatre.

Discussion

Increased cutaneous laxity and localized fat deposits are the main complaints of patients with contour deformities in the medial thigh regions. While the upper third of the thighs are mostly affected in patients with age-related cutaneous ptosis, in patients with massive weight loss, the upper third of the thighs to their entirety are affected [2,4,7,8].

Cutaneous ptosis limited to the upper third of the thigh can be corrected using horizontally oriented Lockwood's original anchoring technique, while cutaneous ptosis extends beyond the upper third of the thigh can be corrected with vertical scar techniques (a T-like vertical scar, an inverted J or L). In the vertical scar technique, the length of the vertical scar may extend depending on the deformity of the patient [4, 7, 8, 9].

Thromboembolic events such as deep vein thrombosis and pulmonary embolism, which are the most serious complications of thigh lift procedures, are rarely encountered. Skin or fat necrosis, hemorrhages and hematomas, lymph fistulas and lymphoceles have seldom been reported in literature. Minor complications are wound infections, postoperative seromas, delayed wound healing, wound dehiscence, prominent scars, scar migration, recurrence of ptosis and vulvar distortion [7, 10, 11]. Complication rates are highest for full-length vertical thigh lift (74 percent), while they are lower for short scar (67 percent) and horizontal (43 percent) procedures [11].

A visible scar is common after the horizontal procedure, possibly with distorted labia majora.

Subcutaneous undermining can be limited and any potential for tension on the labia majora can be avoided to reduce this complication [12].

The vertical scar technique using both anterior and posterior horizontal vectors lead to circumferential reduction of the thighs so that skin tension is distributed over the entire thigh. In this procedure, a horizontal incision can be performed to eliminate 'dog ears'. Compared to horizontal technique, the vertical technique does not imply a risk of scar tension with consequent downward migration and displacement of the labia majora. If the vertical ellipse is placed posteriorly, it does not cause the labial distortion and anterior scarring. The risk of permanent lymphedema can be reduced by avoiding lymphatic disruption [6,8].

If a horizontal skin resection is to be performed, it is critical to assess the degree to which any downward traction is transmitted across the perineal junction to produce labial distortion. As Cram et al [6] indicate in their study, a point should be chosen where the pinch has minimal effect on the position of the labia on the gluteal fold. In our study, we tried to determine the anatomical landmarks of this point. The point that the horizontal line passing through point F and the gluteal fold intersected is determined as the intersection point A. This point, placed on the natural crease, is also determined as the intersection of the midline of the vertical ellipse with the gluteal fold, forms the apex of the T-shaped incision. Starting from this point, a vertical line is drawn down to the medial aspect of the thigh. This line is the midline of the marked vertical ellipse which allows us to estimate the final location of the scar.

We observed that vulvar distortion did not develop in any of our cases operated with this method (Figure 3a,b). In addition, the technique we propose has the advantage that the resection

line can be adjusted accordingly if there are areas where the resection is too tight or too loose. However, it is the disadvantage of our technique that it cannot prevent wound dehiscence seen at the intersection A, which we observed in one of our 3 cases.

Due to the demands of an increasing number of patients today, this technique has become an integral part of the therapeutic armamentarium of plastic surgeons. Based on normal anatomy, we designed a method to prevent labial distortion that may occur after the medial thigh lift. Thus, by virtue of these lines and determined points, we aimed to ensure the continuity of the natural appearance of the vulva after the medial thigh lift procedure and to facilitate the surgical planning.

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References

- [1] Lewis Jr JR. The thigh lift. J Int Coll Surg. 1957; 27(3): 330-4.
- [2] Lewis Jr JR. Correction of ptosis of the thighs: the thigh lift. Plast Reconstr Surg. 1966; 37(6): 494-8.
- [3] Mathes DW, Kenkel JM. Current concepts in medial thighplasty. Clin Plast Surg. 2008; 35(1): 151-63.
- [4] Lockwood TE. Fascial anchoring technique in medial thigh lifts. Plast Reconstr Surg. 1988; 82(2): 299-304.
- [5] Le Louarn C, Pascal JF. The concentric medial thigh lift. Aesthetic Plast Surg. 2004; 28(1): 20-23.
- [6] Cram A, Aly A). Thigh reduction in the massive weight loss patient. Clin Plast Surg. 2008; 35(1):165-72.
- [7] Bertheuil N, Carloni R, De Runz A, et al. Medial thighplasty: Current concepts and practices. Ann Chir Plast Esthet. 2016; 61(1):e 1-7.
- [8] Kenkel JM, Eaves FF 3rd. Medial thigh lift. Plast Reconstr Surg 2008; 122:621-2.
- [9] Bracaglia R, Tambasco D, Gentileschi S, et al. L-Shaped Lipothighplasty. Ann Plast Surg. 2015; 75(3): 261-5.
- [10] Jandali Z, Loh CY, Athanassopoulos T, Müller K. An improved dual approach to post bariatric contouring - Staged liposuction and modified medial thigh lift: A case series. Indian J Plast Surg. 2014; 47(2): 232-5.
- [11] Gusenoff JA, Coon D, Nayar H, et al. Medial thigh lift in the massive weight loss population: outcomes and complications. Plast Reconstr Surg. 2015; 135(1):98-106.
- [12] Labardi L, Gentile P, Gigliotti S, et al. Medial thighplasty: horizontal and vertical

procedures after massive weight loss. J
Cutan Aesthet Surg. 2012;5(1):20-5.