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Lower Body Lift: Preoperative Markings, Surgical Procedure and Complications

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ABSTRACT

The goal of this article is to describe the surgical technique of the lower body lift by positioning the scar correctly, using precise preoperative markings and how to prevent the most frequent complications.

Introduction

The increasing prevalence of obesity and the development of bariatric surgery have led to the gradual development of skin redraping techniques. Body lifts is the unique solution for the large skin excesses that occur after massive weight loss.

Body lifts are surgical procedures that are infrequently performed because the length of operating time increases the risk to the patient as well as the likelihood of surgeon fatigue.

In this article, we describe the surgical technique used in our department, and the most frequent complications.

Preoperative marking

Precise markings constitute the most important step in the process, the goal is to hide the incision under the swimming pool suit. It is performed the morning of the operation on a patient in standing position, and we mark [1]:

1-Dorsal Marks

- The midline of the back: correspond to the inter spinal line
- Lower resection line: is marked at the top of the groove between the buttocks.
- Upper resection line: is estimated by pinching and it rarely exceeds 10 cm.

2-Lateral Marks

- Two lateral lines: two lines are drawn along the mid axillary line. This lines cuts across the middle of the iliac crest. It separates two very different areas in which the directions of the stretching are opposed. In the abdomen, the stretching is made from the top to the bottom. In the buttocks, this is the inverse.
- The iliac crest: is located and marked, and the height of the upper resection line at the mid axillary must be 4 cm below the iliac crest
- To determine the lower resection line on the mid axillary line the positioning is done by pinching. The lower part can rise 15 to 25 cm.

Finally, the posterior and lateral markings are joined to determine the incision lines.

3-Abdominal marks

The markings start at the mons pubis and follow the rule of 7 as in a classic abdomiplasty. The incision line is 7 cm from the superior border of the vulva, this leaving a 7 cm high pubic hair triangle. Laterally, the line is horizontal and 7 cm long on each side.

- The lower incision: is marked with joining the lower lateral line at the level of the lateral line of separation of the body when tension is placed upwards on the skin.
- The upper resection limit: can be marked but it is not precise, it will be determined during surgery depending on the amount of tissue to be resected.

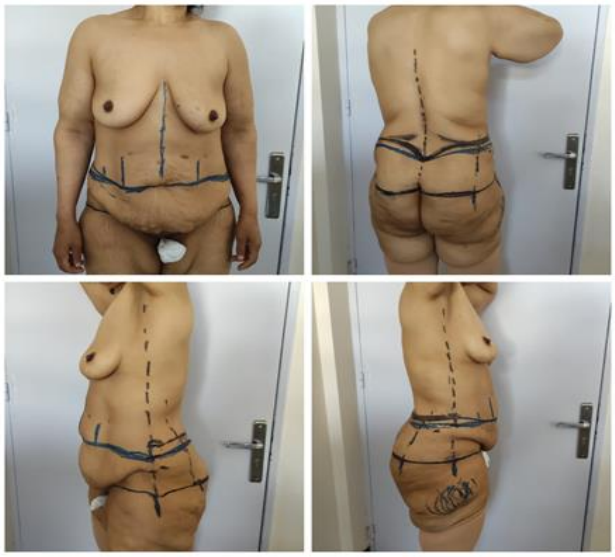

Figure 1. Preoperative markings.

Surgical procedure

1-Posterior step

The procedure start on a patient in prone position, we infiltrated all areas of surgery particularly in the regions where liposuction is needed, and then we start the resection of the excess skin in the back respecting the lines determinates in the preoperative markings.

The sutures must be stronger to prevent the risk of separation when turning the patient from prone to a supine position.

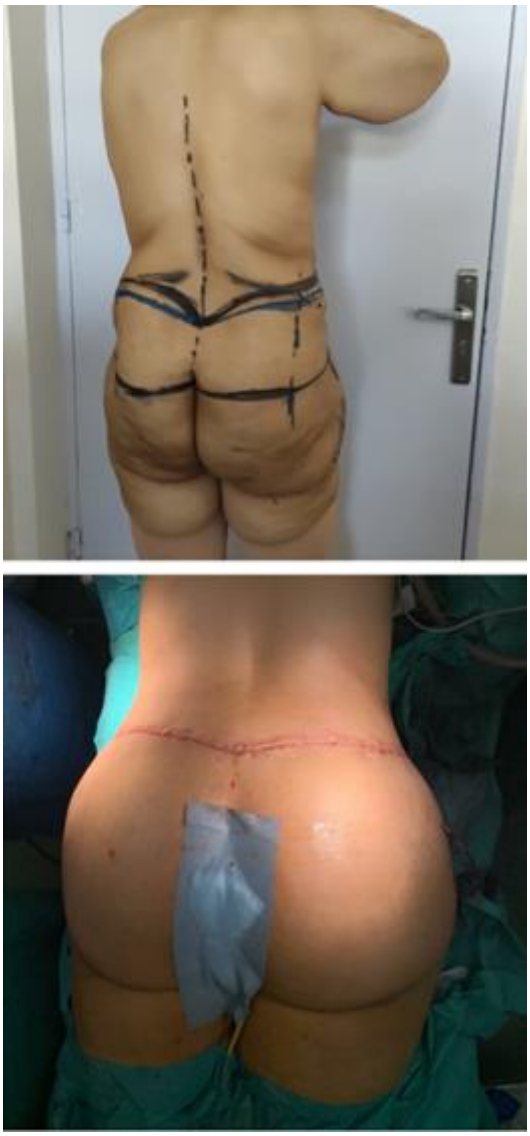

Figure 2. Immediate post-operative aspect of the posterior step. Notice the shape of the buttock.

2-Anterior step

After infiltration and performing liposuction in the pre determinates areas, we do a classic abdominoplasty, with the High-Superior-Tension Technique [2].

The incision follows the previously determined markings, and the dissection is superficial in the hypogastric area to preserve lymphatics, and then the dissection is being strictly pre aponeurotic as a tunnel in the epigastric area.

The diastasis is treated performing an aponeurotic plication from the suprapubic area to the xiphoid process.

Then the patient is turned to the half-seated position to determine the excess skin that is resected.

The umbilicus is transposed; the site must be located 2cm higher than the projection of the umbilicus stalk on the skin. This gap between the new umbilicus and the umbilical stalk allows the high superior tension.

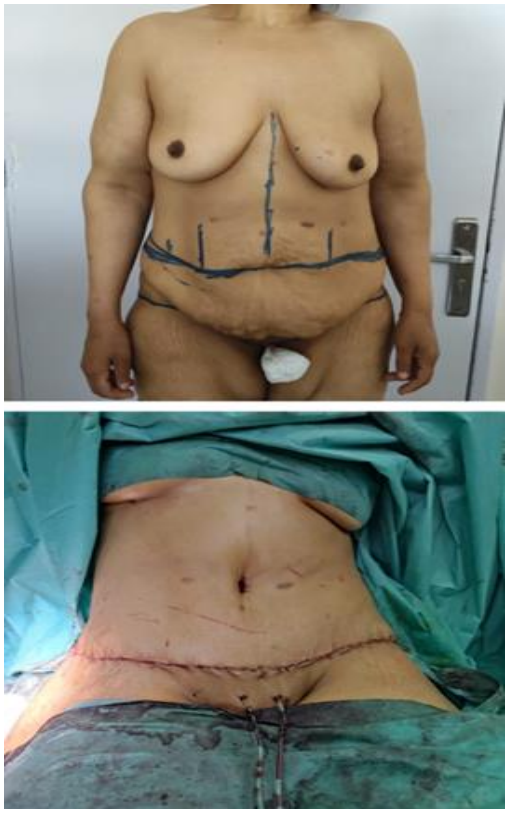

Figure 3. immediate post-operative aspect of the anterior step.

The level of patient satisfaction is very high after a body lift. These patients are usually candidates for brachioplasty and cruroplasty after 6 to 12 months of convalescence.

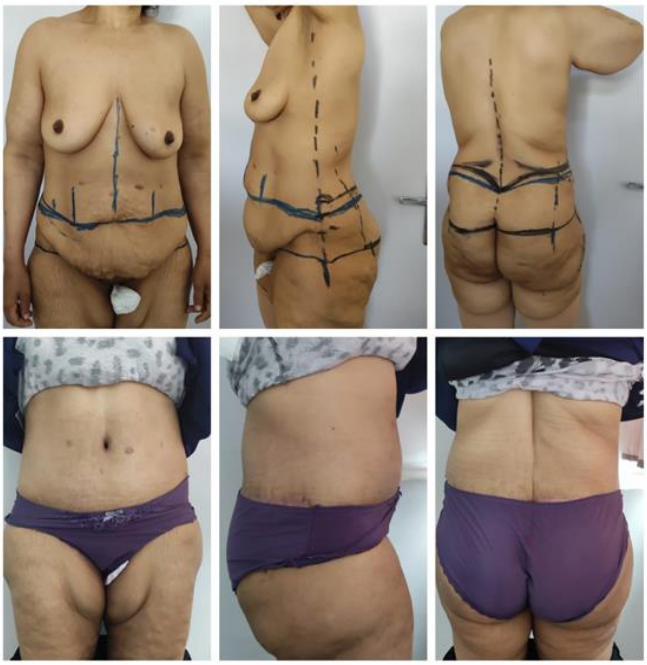

Figure 4. 6 months post-operative aspect.

Complications

1-Blood loss

The first complication of this surgery is a potential blood loss, the duration of the operation, the length of the incisions and the volume of the liposuction increase the risk. We can reduce the risk by [3]:

- Infiltration with serum and adrenaline
- Meticulous hemostasis to reduce bleeding
- Iron therapy one month before surgery
- Auto transfusion
- Reducing the time of the surgery

2-Seroma

Is the second most frequent complication, we can prevent it by:

- Drastic closure of the dead space with strong stitches
- Maintain the drains 48 to 72hours before surgery
- Placement of an abdominal sheath, which must be kept 6 months before surgery
- Abdominal physiotherapy with massage, which must be started 1 months before surgery

3-Embolism

This complication can rarely occur if all prophylaxis is established by:

- Faster mobilization
- Wearing compression stockings during and after surgery
- Preventive heparin therapy, which must be maintained 15 days after surgery
- Bed in slopping position, feet raised
- Calf massage by the physiotherapist
- Stopping the contraceptive therapy 1 month before and after surgery

4-Necrosis

Skin necrosis is very rare and usually occur when the detachments are very large with very important resections.

5-Sepsis

The risk of sepsis is reduced with rigorous asepsis and prophylaxis antibiotics.

Conclusion

The lower body lift is a very long procedure, which requires an experienced team, the preoperative markings, is very important and should be precise, because it’s can be reduce significantly the time of the surgery and the knowledge of the main complications helps surgeons to prevent and manage them.

References

1-J.F. Pascal, and C. Le Louarn. Remodeling Bodylift with High Lateral Tension. Aesth. Plast. Surg. 26:223–230, 2002

2-Claude Le Louarn, Jean Francois Pascal. The High-Superior-Tension Technique: Evolution of Lipoabdominoplasty. Aesth Plast Surg (2010) 34:773–781

3-J.F. Pascal, C. Le Louarn. Complications des bodylifts. Annales de chirurgie plastique esthétique 49 (2004) 605–609

4-TED LOCKWOOD, MD. LOWER BODY LIFT. Operative Techniques in Plastic and Reconstructive Surge~ Vol 3, No 2 (May), 1996: pp 132-144

5-Dirk F. Richter, Alexander Stoff. Circumferential Body Contouring. Clin Plastic Surg 41 (2014) 775–788

6-Eric Swanson. Near-circumferential Lower Body Lift: A Review of 40 Outpatient Procedures. Plast Reconstr Surg Glob Open 2019;7:e2548

7-Hacquard J, et al. Bodylift inférieur après amaigrissement massif : étude rétrospective de la satisfaction, des complications et de la qualité de vie. À propos de 76 patients sur 4 ans. Ann Chir Plast Esthet (2016)

8-Langer, et al. Body contouring following massive weight loss. Indian Journal of Plastic Surgery January-April 2011 Vol 44 Issue 1

9-Raphael Carloni, Antoine de Runz, Benoit Chaput, Christian Herlin, Paul Girard, et al.. Circumferential Contouring of the Lower Trunk: Indications, Operative Techniques, and Outcomes-A Systematic Review. Aesthetic Plastic Surgery, Springer Verlag, 2016, 40 (5), pp.652–668. ff10.1007/s00266-016- 0660-7ff. ffhal-01392032f.