Combining Gluteal Shaping with High-Definition Liposuction

New Concepts and Techniques

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KEYWORDS

• Body contouring • Anatomy • High-definition liposuction • Gluteal contouring • Fat grafting • Buttock aesthetics

KEY POINTS

- Buttock aesthetics are not only male/female-based anymore.
- New aesthetic trends are based on binary and non-binary appealing preferences, which the surgeon must acknowledge before attempting gluteal liposculpture.
- Fat Grafting to the buttocks' area is not just volume enhancement and equalization but also 4-dimensional projection and structural support for long lasting results.
- Dynamic Definition Liposculpture enhances the volume perception and the natural slim/athletic contour of both the lower extremity and the lower back, which boosts up the projection of the buttock and reducing the need of massive volume lipoinjection.
- Most complications after gluteal reshaping procedures can be either prevented or acknowledged with proper planning and execution.

BACKGROUND

The appearance and projection of the gluteal region are considered an evolutionary adaptation to erect and bipedal posture.[1] Gender, culture, and geography influence the aesthetic standards of this anatomic region.[2,3] Objective definition of a beauty buttock includes contour uniformity, adequate projection of the mid and upper third, as well as softness, skin smoothness, and elasticity, while peri-gluteal fat accumulation has been shown to distort the ideal gluteal shape.[4] Four variables interact to give the buttocks their appearance: underlying bone framework, gluteus maximus muscle, subcutaneous fat, and skin.[5] Out of these variables, *subcutaneous fat* is considered the most important and susceptible to intervention. It contributes to buttock projection and impacts the framing over which the gluteus muscle rests.[1,5]

Artistic Anatomy

Both High Definition (HDL) and Dynamic Definition Liposculpture (HD2) incorporate lipoplasty techniques for the whole body and not an individual region. However, in this article, we will be extrapolating concepts from HDL and HD2 to the buttock area. Gluteal shapes are defined according to the amount of fat located in 3 different anatomic sites: the upper lateral hip, the most protruding point in the lateral thigh, and the lateral mid-buttock. The resulting shapes are square, A-shaped, V-shaped, and round.[5] Variations in

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subcutaneous fat distribution take place during age, weight gain, or loss processes, and differ according to sex and ethnicity.[1] Indeed, android and gynoid body types depend on gluteal fat distribution. The lateral border of the gluteus is continuous with the anterior thigh and pelvis. As women age, they tend to develop a centralized fat distribution pattern with the greatest differences at the waist and mid-trochanter level compared to younger women, buttocks increase their height and lengthen the intergluteal crease and intergluteal fold.[1] Similar changes are caused by weight gain. Previously, "ideal" female buttocks had to have the shape of a hemisphere whereby the only defined edge would be the inferior-medial zone whereas the other borders would smoothly diffuse within the leg and torso. Comparatively for men, a square shape during resting position (standing) and a butterfly shape with active contraction, altogether with sharp muscle borders and gluteus medius definition would be the most accurate approach. We strongly believe that the lower back and the hamstrings are both highly determinant in defining this round/squared shape of the gluteus; however, recent trends of society towards avoiding binary limitations of many different human philosophies have also impacted the aesthetic surgery field in the good way of broadening our perspective of HDL. In effect, prior aesthetic concepts can be merged to achieve not only a male or female *façade* but rather variable degree of definition in HD2. To note, male gluteal shape is mainly determined by the underlying gluteus maximus with little adipose tissue, with sharp edges producing a distinctive slim and muscular appearance. Due to hormonal receptors and estrogen related-fat deposits, men do not accumulate significant amounts of adipose tissue in the gluteal area but rather in the central abdomen and torso compared to women, who usually accumulate fat over the hips, legs and arms. These gender differences are a determinant for the surgical technique, aesthetic goals, and postoperative recovery.

Aesthetic zones of the gluteal area

We described 4 anatomical zones for men, and although they are quite related to those from women, the surgeon must acknowledge that for the latter such sharp limits ultimately blend with each other to create a continuum of body silhouette (**Figs. 1** and **2**). Therefore.

- *Zone 1* (flank) extends from the posterior lower rib cage margin to the superior iliac crest and lateral border of the erector spinae muscles. This region blends with the superior gluteal area in women (a.k.a. *Red zone*) and should be named the supragluteal flank area (a.k.a. *Green zone*) whereby thorough liposuction will help to define the waistline (point W).
- *Zone 2* or Central zone is subdivided into 2 areas: the rhomboid of the sacrum (rhomboid of Michaelis) and the erector spinae muscles. The appearance of an adipose pad over the sacral prominence is possible, particularly in overweight and obese patients. This zone has virtually the same configuration for women.
- *Zone 3* or Gluteal zone is subdivided into the following 3 areas: Gluteus maximus, Gluteus medius, and Trochanteric depression. The gluteus maximus is dominant and contributes to the glute convexity, particularly in slim

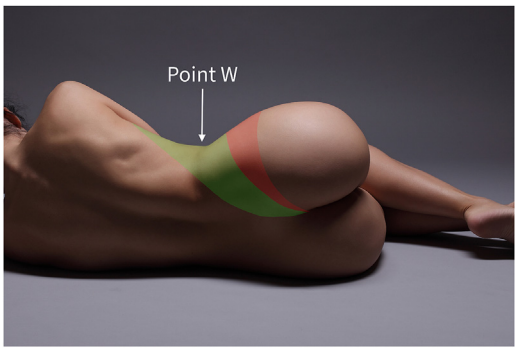

Fig. 1. Aesthetic zones for the feminine appearance of the gluteal area. Red zone: lateral and above the superior pole of the glutes. Green zone: Supragluteal flank area. Point W: Most pronounced limit of indentation over the waist.

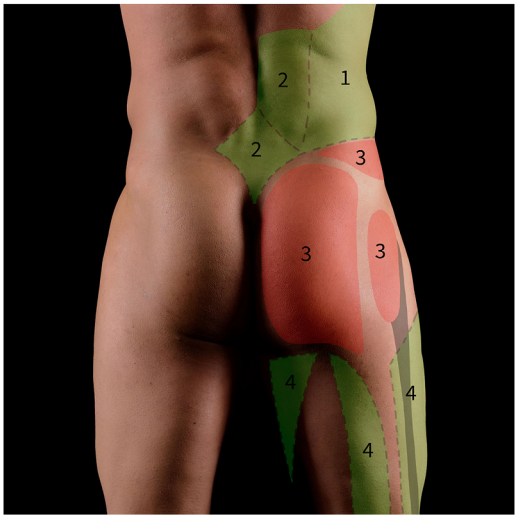

Fig. 2. Aesthetic zones for the masculine appearance of the gluteal area. Zones 1-4.

individuals. A depression over the posterior superior iliac spines is created by the lack of muscle coverage of this bony structure, which should not be sharply defined in women, but actually blended (*green* and *red zones*). The inferior medial border of the gluteus maximus is covered by gluteal fat and provides volume to the medial region of the infra-gluteal fold. The muscle bulk of the gluteus maximus (posteriorly) and the gluteus medius (superiorly) create a "C"-shaped concavity with the greater trochanter. This depression is important to keep the masculine appearance as it is more pronounced in men than women. To note, a mild to moderate definition of this area will help women to achieve a more athletic and muscular appearance, while a soft blending will result in a more delicate gluteal area for men. Additionally, the gluteus medius can be fat grafted to increase its lateral projection and both the athletic and masculine appearance of the buttock, however, we do not consider it necessary for women.

- *Zone 4* or Infra-gluteal zone is subdivided into 4 areas: Adductors, Biceps femoris, Iliotibial tract, and Vastus lateralis. Above the iliotibial tract, Tensor fascia latae muscle fuses superiorly with the upper portion of the gluteus medius and, eventually, the flank.

Infragluteal fold

Recent cadaveric-based studies have changed the anatomic standpoints of the structure of the Superficial Fascia System (SFS) at the gluteal region.[6] In fact, there is no such thing as a uniform structure but rather a genetically predisposed configuration of both the dermic and fat components of the SFS at the infragluteal fold (IFF). Its length and toughness will depend on: 1- Number of fibers and disposition of the supporting connective tissue coming from its origin at the sacrum; and 2- The variable adipose component that will ultimately blend laterally with the SFS of the thigh (**Fig. 3**). Peri-gluteal fat below the inferior gluteal fold deserves a special consideration. What we all know as "banana roll" is actually a unique female anatomical subdermal configuration below the inferior gluteal fold that resembles a reel. The interplay of the posterior fascia latae of the thigh with the cutis-dependent SFS of the gluteal fold will derive in a wider, thinner or even absent roll. Therefore, this zone cannot be over-resected as it may alter the gluteal surrounding and end up with a fake or prosthetic appearance, rather than a natural one. On the other side, there is a growing amount of non-binary patients who would prefer a different body profile including their buttocks.

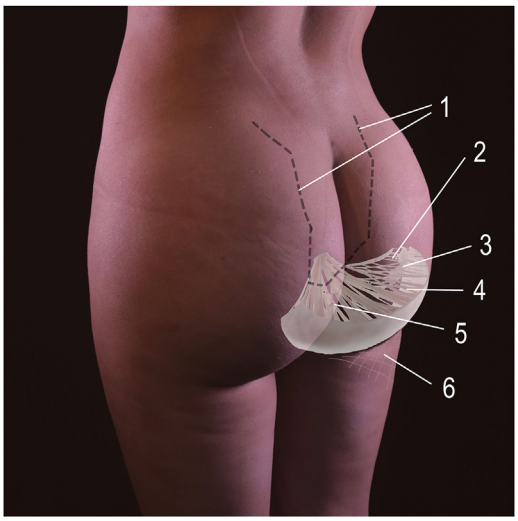

Fig. 3. Structure of the Infragluteal fold and its relationship with the superficial fascia system of the thigh. (*Adapted from* Si L, Li Z, Fu L, et al. Gluteal Fold: Cadaveric Dissection of the Superficial Fascial System in the Buttock and Anatomy-based Gluteal Liposculpture [published online ahead of print, 2023 May 22]. Plast Reconstr Surg. 2023;10.1097/PRS.0000000000010723.)

Some of them stick with the usual gender-based approach, while others do want an "in-between" pattern. Regarding body feminization, the goal is to recreate the well-known hourglass feminine body shape, which includes a low waist-to-hip ratio (approximately 0,6/0,7), compared to that of the traditional V-shaped male figure. In that sense, "in-between" pattern for women would be a more square-shaped buttock, while a rounder shape would be for men. In fact, women who are actually very fit and muscular usually prefer a soft definition of the trochanteric depression (which is an actual feature of male buttock reshaping) to improve the muscular appearance of their glutes.[7]

Current gluteal definition procedures include the use of implants, autologous fat transfer, excisional procedures, autologous gluteal augmentation with tissue flaps and liposuction. Implants have a slightly higher incidence of complications compared to that from fat grafting; yet, hybrid surgeries show very promising results for those patients who would require massive-volume lipoinjections.[8–12] Additionally, even if most of the patients who undergo these procedures are females, there has been an increase in the number of men who pursue aesthetic body contour surgery, which has challenged plastic surgeons to develop male-specific approaches. New approaches to gluteal contour reshaping and enhancement in men focus on the desired shape

at rest and during contraction, associated to dynamic definition body contouring principles, providing a natural look aligned with the patient's underlying anatomy. Del Vecchio and colleagues, recently published a practice advisory regarding gluteal fat grafting. The recommendations of this task force include the utilization of ultrasound-guided documentation of cannula placement prior to and during fat injection, and the limitation of 3 BBL cases as a maximum amount of total operative cases per day.[13]

SURGICAL TECHNIQUES

Preoperative Markings

In preparation for the contouring procedure, the areas for deep liposuction in women are marked as follows: the flanks, the sacral fat pad, the hips, and the lateral and medial thighs. The sacral dimples are marked for pure framing, these define the basic definition markings. The roll below the gluteal fold is also marked, as it will determine the inferior projection of the gluteus. Also, we should consider that the marks for superficial liposuction are set according to the definition degree desired. In men fat deposits in the gluteal area are marked for resection (**Fig. 4**).

Patient must be in the standing position for special markings. The superior gluteal edge is identified following the shape of the iliac bone to the anterior iliac crest. Subsequently, the posterior lower rib edge and the lateral border of the erector spinae are marked, delimitating the flank zone whereby the fat can be freely removed. To note, either rib corticotomy or resection can be done to improve the waist definition in both men and women. In female patients we must identify the maximum point of indentation (PMI) in the waistline and trace a line to the upper limit of the intergluteal crease (UIC), and then a line from this point to the superior iliac crest. The triangle area created is the first green zone (zone for free fat extraction). Next, the trochanteric depression is marked on the lateral side and a line is traced from its upper limit to the top of the inter-gluteal crease creating a triangular area (red zone) for complete (deep and superficial) fat removal. This marking is common for both male and female patients. The gluteus maximum upper limits are then marked in contraction (**Fig. 5**).

For both male and female patients, the inferior gluteal area is marked and divided into four zones by placing a vertical line through the center of the gluteus maximus and a horizontal line through the inferior gluteal fold. We mark negative spaces according to gender. In males a total of 3 negative areas (targeted for smooth definition and carving

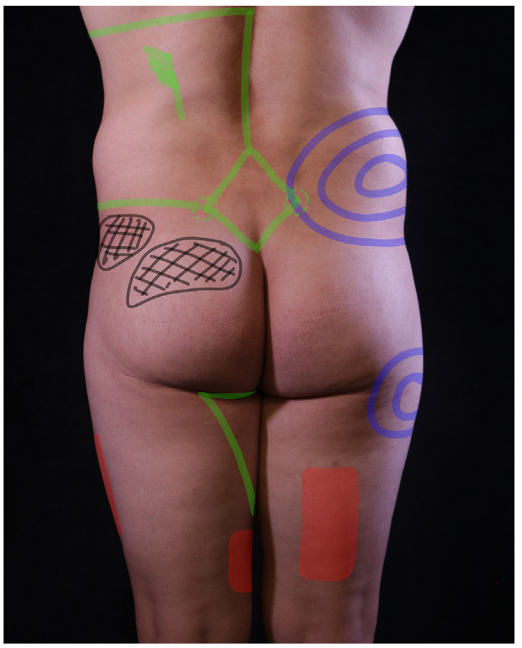

Fig. 4. Preoperative gluteal markings of the male patient. Adipose deposits are marked with blue. Negative spaces are marked with green. Adhesion zones are marked with red, while zones for fat grafting are marked with purple.

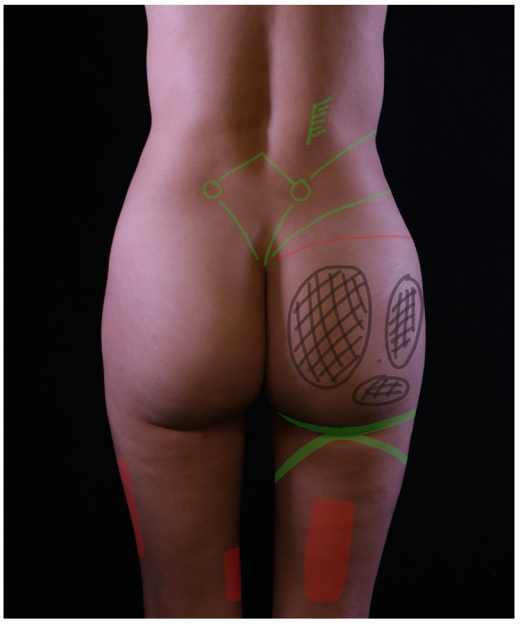

Fig. 5. Preoperative gluteal markings of the female patient. Negative spaces (*green*) and adhesion zones (*red*) are marked together with the zones for fat grafting (*purple*).

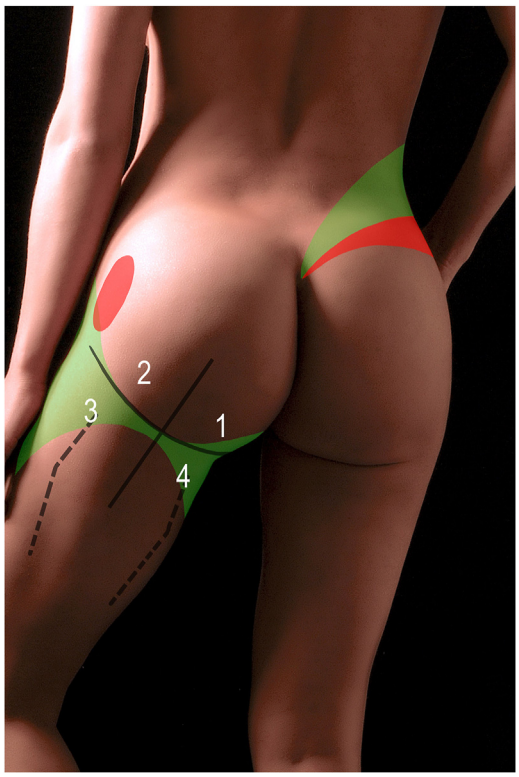

Fig. 6. Gluteal specifics of the inferior zone of the female buttock and its relationship with the thigh.

out the fat for body sculpting are marked: the proximal portion of the inner thigh, the red zone, and the trochanteric depression).[14] The adhesion zone of the middle third of the inner thigh is marked in order to avoid deep liposuction over this area. If absolutely necessary, just a soft and smooth superficial liposuction can be performed in this area. Lateral to the infra-gluteal midpoint, the border of the gluteus is identified by grasping the posterior thigh muscles and rotating them externally to identify extra fat on the lateral buttocks which can be shifted or removed by smooth liposuction.

In women, we divide the inferior gluteal area into 4 major negative spaces according to the mid-gluteal point (**Fig. 6**).

- Zone 1: Inferior-medial gluteal area must form an acute angle to recreate a round-like buttock. It forms a continuum in the midline with the intergluteal groove.
- Zone 2: Lower external gluteal area forms a transition between the lateral buttock and the external facet of the thigh. A soft definition towards the inferior edge of the trochanteric depression and a soft blending are both mandatory to avoid an unnatural appearance.
- Zone 3: Proximal inner thigh confluences with *Zone 1* to recreate a round buttock and follow the infragluteal fold. It is important to recall that the inner thigh is divided in thirds; the middle is an adhesion zone, which contains only superficial fat, so over resection should be avoided in this area. The upper-inner thigh holds a high stem-cell concentration and is safe for both deep and superficial liposuction.
- Zone 4: Outer thigh is extended from the lateral portion of the gluteal area (*Zone 2*) to the lateral tight. It usually requires deep thorough liposuction to remove all extra fat at the lateral hip but blending upwards with the trochanteric depression and downwards with the lateral thigh.

Women looking for a more masculine appearance will require a sharper definition of a shadow behind the iliotibial tract (soft trochanteric depression). In the contrary, men looking for a more feminine appearance require a round buttock at the trochanteric depression and a soft transition with the gluteus medius.

Intraoperative procedures

Patient is placed in the prone position. Incisions are performed at the midpoint over the infragluteal fold on each side and at the inter-gluteal crease. We follow the classic 3-step process

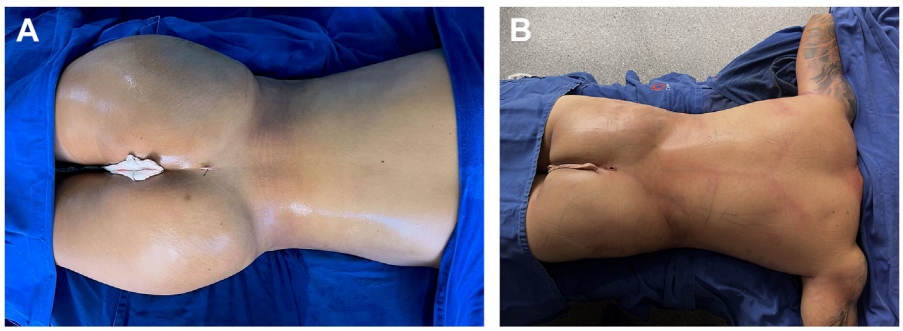

Fig. 7. Muscular definition of the lower back and its continuum with the buttocks in a female (*A*) and a male (*B*) patient. To note, no fat grafting was required for this purpose.

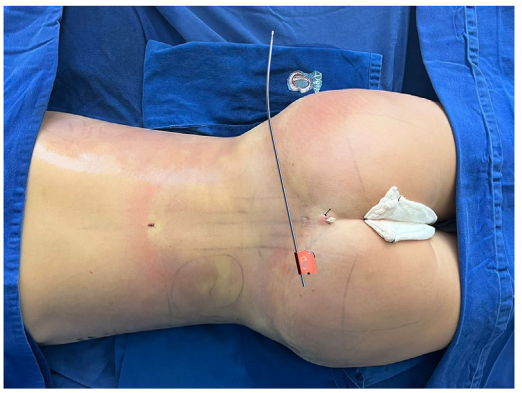

Fig. 8. Long curved cannula to reach the gluteal contour, including the trochanteric depression, the red and green zones.

(infiltration, emulsification, lipoaspiration) for Liposuction and then perform selective fat grafting. Infiltration is made with saline (1000 mL) combined with a 1:1000 ratio of 1% of lidocaine (10 mL) and epinephrine (1 mL) fat emulsification is achieved using VASER Lipo® system with a 3.7 mm 2-ringed probe and a 2.9 mm 3-ringed probe for the flank area and the thigh respectively. Once the emulsification (step 2) is complete, we proceed with liposuction.

We start liposuction in the deep layer with a 4-mm straight Mercedes cannula. In males, this step is started over the lower back and upper gluteal area via the inter-gluteal crease incision. Fat lipoaspiration from the lower and lateral gluteal region and from the inner thigh is performed through the infra-gluteal midpoint incision bilaterally. Then, the upper limit of the gluteus maximus and the lower internal area are both defined. Once the posterior zones are completed, liposuction of the inner thigh is completed with the patient in the supine position.[15,16] In contrast, we prefer 3-mm Mercedes cannulas for deep Lipoplasty in females. This is because we need soft transitions between the lower back (green zone) and the upper gluteal region (red zone) in addition to a soft blending towards the trochanteric depression. This area is difficult to access from the central intergluteal incision; so special cannulas are designed for this purpose (40 cm-long and 3-mm curved Mercedes cannula). Lipoaspiration of the lower and lateral gluteal areas is done through the infragluteal incisions. The inner thigh must be carefully sculpted to avoid abrupt transitions from the mid-inner tight adhesion area. On the lateral lower gluteal area, a negative space is created to blend the deep extraction in the lateral thigh and the gluteus to create a rounded shape.[17]

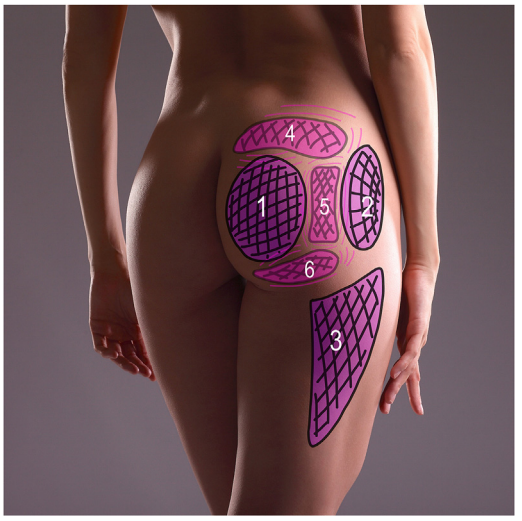

Fig. 9. For a feminine appearance, we use the inferior gluteal fold to inject two big adipose grafts for AP[1] and lateral[2] projection respectively. Then we place a small superficial graft at the gluteal pillar,[3] which will support the thigh and will improve the transition with the lateral thigh (optional). The buttock upper pole,[4] the supra fold area[6] and in-between zones 1 and 2[5] we place small superficial grafts that will smooth the transitions between big grafts.[1,2]

Regarding superficial liposuction, in men we aim for a sharp definition of the area above the gluteus maximus and at the lumbar rhomboid surroundings, including the erector spinae muscles. The gluteus medius will require fat grafting to enhance the butterfly appearance of the buttock and its squared shape. Comparatively, in women the superficial lipoplasty will depend on the degree of definition and how masculine they want their buttocks. In general, we advocate for soft transitions between muscle borders and aim to achieve a round shaped buttock. We also carve the rhombus of Michaelis and erector spinae muscles to improve the volumetric perception of the buttock; however, we do not recommend fat grafting of such muscles as it is not necessary (**Fig. 7**).

Carving the negative spaces allow transitions between concavities and convexities over the upper border of the gluteus maximus, the trochanteric depression, and the medial infra-gluteal fold. These areas should be defined more sharply in men compared to women, however, remember that there is an in-between definition for both depending on gender identification and individual preferences. Thorough liposuction is done over the lower flank areas to overlap its definition with the upper portion of the gluteus medius (intergluteal crease access). A sharp edge must be also created in the anterior zone over the tensor fascia latae muscle, then we do a transition zone moving posteriorly towards the gluteus maximus

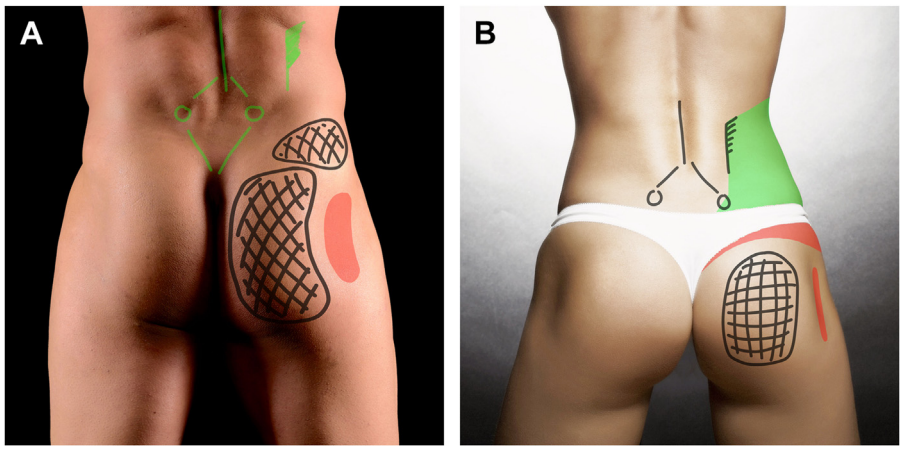

Fig. 10. The masculine buttock requires a butterfly shape (*A*) and a sharp definition of the gluteus medius with intramuscular fat grafting. The gender-neutral buttock (*B*) has features from both, then it can be the result of either the masculinization of a female's buttock or the feminization of a male's buttock. In effect, trochanteric depression is no longer a deep space but rather a linear definition (*B*). The green and red zones have to be considered and the gluteus medius is usually not grafted.

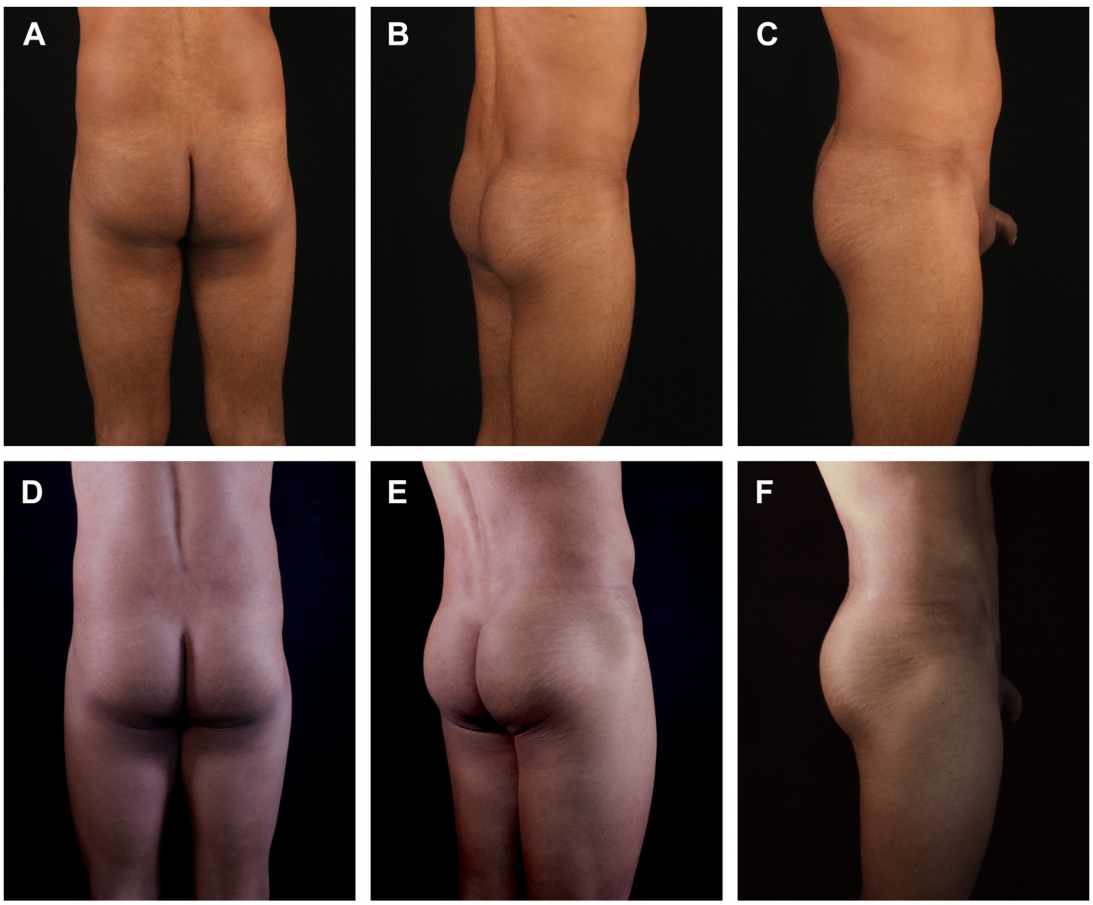

Fig. 11. Male patient who underwent the dynamic definition of the gluteal area including the posterior torso (*A–C*). Look how the buttock shape has been enhanced towards an athletic and squared shape (*D–F*).

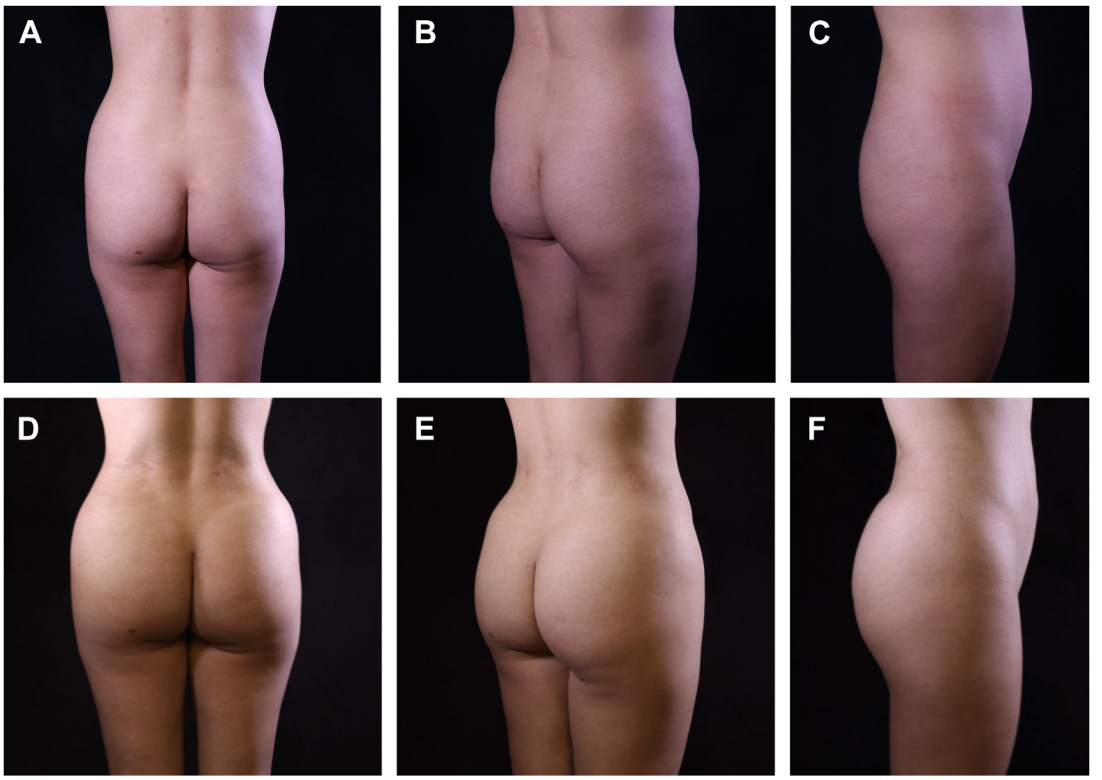

Fig. 12. Female patient undergoing the dynamic definition of the gluteal area and the lower limbs (*A–C*). Postoperative photographs (*D–F*) show a rounder buttock with the slim definition of the waist and the legs forming a continuum soft silhouette.

and superiorly reaching the gluteus medius. A curved cannula can be used for this purpose. Each zone is carefully revised, and refinements can be done depending on individual situations (**Fig. 8**).

Holometric fat grafting

One of the latest improvements in buttocks surgery has been the safety but also multi-dimensional approach of buttocks adipose tissue transfer.[2,13,18–20] In certain states (ie, Florida), it is now mandatory to use real-time intraoperative ultrasound while attempting buttock lipoinjection.[13,18,21–23] The surgeon must ensure the proper plane for which the graft will be placed and the distribution of the graft after injection. A proper mapping before lipoinjection including a blood vessel assessment through doppler mode are safe practices to get used to in order to decrease complications and improve the aesthetic outcomes.

Our technique for fat grafting (FG) has been improved along with our continuing expertise in body contouring. It is based on the current concepts about Static Injection, Migration and Equalization but modified to harmonize with the patient individual preferences and gender Identification.[24]

Multiple cadaveric studies have shown the peculiar anatomic structure of the gluteal area, specifically about compartments, deep fascia and superficial fascia.[6,18,22,25] These compartments allow the surgeon to place different amounts of adipose grafts in different locations so as to provide an individualized shape of the glutes (**Figs. 9** and **10**). Although different approaches are used for FG consistent with evidence for graft survival and safety,[18,26] we use 3- or 4-mm blunt cannulas attached to 60 mL syringes (manual mode) for Intramuscular FG of the gluteus medius and subcutaneous lipoinjection of the trochanteric depression. We couple a 4-mm basket cannula to MicroAire and use a peristaltic pump device (EVL–Expansion Vibration Lipofilling) to perform static injection at the subcutaneous layer. The proximal attachment is connected to a sterile bottle trap in which the adipose graft is ready for reinjection. Decantation is used to isolate viable fat cells from saline and blood cell components. The remaining supernatant is processed and prepared for fat grafting. The gluteal pillars must be grafted in patients who suffer infragluteal fold ptosis and/or lack of projection of the posterior thigh. However, do not over-graft the whole zone as residual

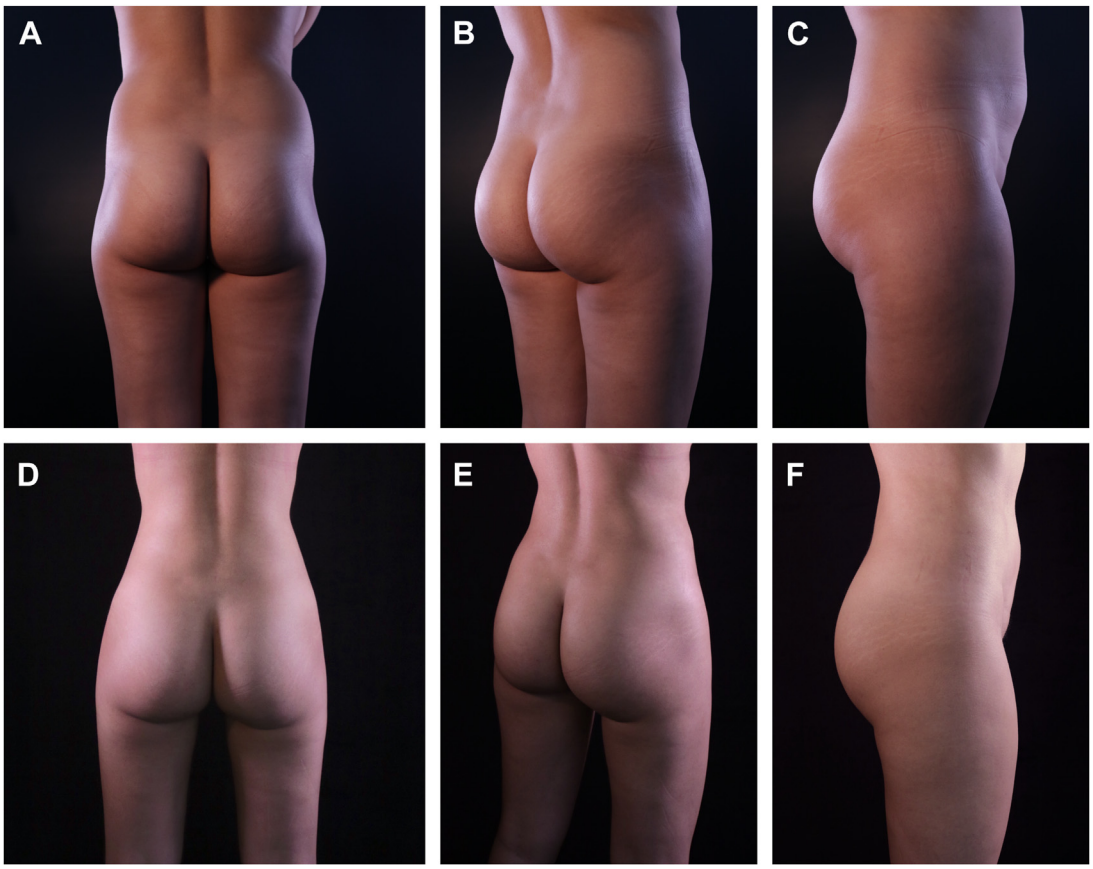

Fig. 13. Female patient who underwent an extreme definition of the glutes (*A–C*). The postoperative photos (*D–F*) show a defined and athletic shape of her buttocks, but still feminine.

bulking may appear. Deep strokes should be avoided, instead use a single injection and then equalization. There is no need to graft the trochanteric depression in round and "A"-shaped buttocks, but it is mandatory for square, and "V"-shaped. The grafting of this area should start from the top to the bottom with small volumes and through continuous strokes. Symmetry must be evaluated through photographs and multi-angle visualization inside the OR. Once the posterior zone is finished, some additional definitions can be done in the anterior zone (thigh and flank). Finally, we place a drain (Blake drain–Johnson®) at the subcutaneous space through the intergluteal crease incision to allow residual fluid drainage. Incisions are closed using a continuous subdermal stitching to avoid the graft leakage. High-absorbent pads are placed over the incisions, followed by the application of a garment and foam vest to facilitate skin adhesion.

Post-operative procedures

Patients requiring >5000 mL of fat extraction, as well as those requiring additional procedures or having comorbidities, such as hypertension or diabetes, should be admitted for overnight observation. Garments and foam vests should be used for 8-12 weeks (**Figs. 11–14**). We use only mild compression for those zones who were subject to fat grafting. Therapeutic lymphatic massage is recommended 2 days before surgery to activate lymphatics towards the inguinal lymph nodes on the inner thigh and daily sessions 10 to 20 times after surgery. Patients may perform isometric workouts to the lower limbs and glutes only 8 weeks after surgery. They might engage in stretching exercises the very next day after surgery. Drains should be assessed at each appointment with the therapist and should be removed on postoperative days 3 to 7 once drainage is less than 50 cc per 24 hours. Although the supine position is recommended during resting, there is no strict contra-indication on positioning. Early mobilization is promoted.

Complications

Although gluteal augmentation via autologous fat grafting techniques has been associated with a

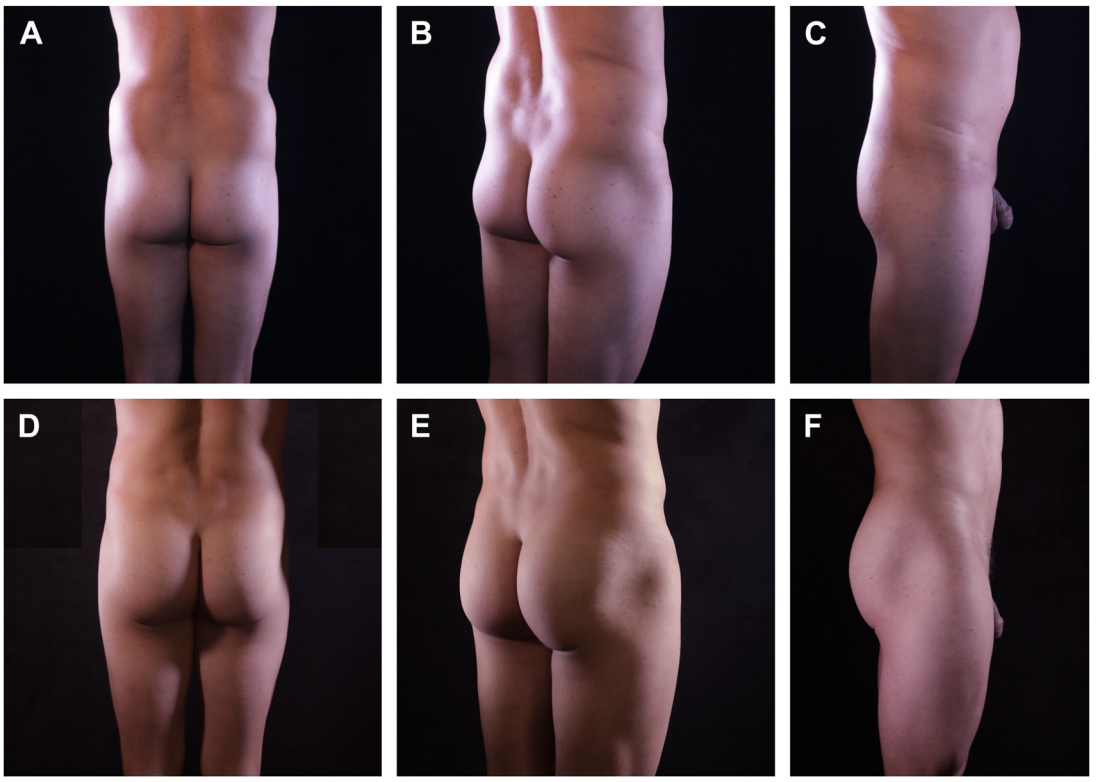

Fig. 14. Male patient who underwent a moderate definition of the glutes (*A–C*). The postoperative photos (*D–F*) show a round projected buttock, but still with the squared masculine shape.

lower complication rate when compared with implants (10.5% vs 30.5%, respectively), series of patients have documented complications including contour irregularities, fat necrosis, seroma, infection, oil cysts, hematoma, paresthesia, postsurgical pain as an intermittent burning sensation in the flank, fat embolism, pulmonary embolism, deep venous thromboembolism, and death.[27–29] According to the statistics of the International Society of Aesthetic Plastic Surgery, the estimated mortality rate of gluteal fat augmentation was one in 20,117 cases, and the estimated rate of nonfatal fat embolism was one in 9,530 cases.[28] The use of autologous tissues avoids the complications associated with gluteal implants, which include seroma, capsular contracture, implant migration, wound-healing issues, thinning of native tissues, implant palpability, and implant-related infections and exposures.[29] However, the plane of adipose graft injection can increase the risk of developing fatal outcomes. The risk of death is 16 times greater when fat graft is performed intramuscularly.[28] Multiple theories address this issue, one of them being the "direct hit" theory, in which due to direct trauma of the nearby blood vessels, fat is injected into the bloodstream.[30] Nonetheless, some of the surgeons who documented fat emboli complications affirm not using the intramuscular plane for fat injection, and this lead to the proposal of the phenomenon of deep intramuscular migration, by which the fat injected in the intramuscular plane under certain pressure is forced to follow the least resistance path towards the deeper planes, causing traction induced venous tears which may lead to passive fat embolization.[30] Surgeons must always take the necessary precautions to avoid any additional risks when performing fat grafting; in addition to those from the gluteal task force,[13,21] we recommend large and single-holed cannulas for the IM gluteus medius procedure, always set the cannula perpendicular to the pedicle, place the graft in the medial muscular zone, place the tip of the cannula far from the main vascular pedicle and avoid multiple injections. There are all protective measures against pulmonary fat emboli because they reduce the risk of injury to vessels, and they are less likely to bend following and undesired path.[31]

SUMMARY

Differences in gluteal reshaping are no longer gender-based but actually will depend on each individual preference. Although gender premises for

dynamic definition liposculpture still apply, the in-between features for both male and female patients allow the surgeon to perform a broader spectrum of procedures that can be individualized according to muscular structure, desires and gender ID. Gluteus medius and gluteus maximus adipose grafts improve the volumetric appearance of the glutes, though a detailed technique is required to avoid complications and improve the outcomes. Unless requested by the patient, do not fat Graft the trochanteric depression in men, this will result in a feminizing facet (round gluteus).

CLINICS CARE POINTS

- Anatomy is the cornerstone for dynamic definition liposculpture.
- Do NOT perform exhaustive superficial liposuction over the adhesion zones of the glutes nor the thighs.
- Avoid over-resection of the gluteal red zone. It will be very hard to correct afterwards.
- Sharp edges and muscular definition are suitable for all male and only female with extreme definition.
- Round glutes and soft definition are for most female and males who want a more feminine appearance.
- Real-time ultrasound imaging is compulsory for any Fat grafting attempt to the buttocks.
- Intramuscular fat grafting is only suitable for the gluteus medius (regarding the buttock area).
- Dynamic definition liposculpture requires a steady learning curve and detailed anatomic concepts to successfully achieve the volumetric perception of the gluteal area and its definition in different degrees of muscularization.

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