





Registration of facial liposculpture protocols: technique article

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Facial Liposculpture Technique

In the context of facial aesthetic treatments, cervicofacial liposuction or liposculpture (LE) stands out, which gently avulses adipose tissue (AT) cells, accurately sculpting unwanted AT deposits on the face and neck [1-3]. In 2020, about 15.5 million cosmetic procedures were performed in the United States alone, according to The Aesthetic Society's 2018 report [1].

In this scenario, optimizations have been made in the techniques of suspending the superficial musculoaponeurotic system and the adjacent fat pads [2,3]. Minimally invasive procedures in facial LE are expanding, resulting in optimal esthetic effects [3-5]. However, as it is technically challenging to remove subcutaneous AT deposits evenly with open techniques, these attempts often produce uneven skin contours. In this regard, lipo contouring techniques provide a means to shape the AT deposits of the neck and face to better obtain the desired facial profile [6].

Therefore, LE is an alternative to facial rejuvenation that involves the skin, release of the retaining ligaments, and appropriate removal of adipose tissue from the subcutaneous layer, while improving skin tone and facial contour. To corroborate this, an observational clinical study with 312 patients undergoing cervicofacial rejuvenation showed the benefits of liposculpture in cervicofacial rejuvenation in terms of reduction of marionette wrinkles, perioral mound removal, V-shaped facial contour, defined jaw, reduced double chin, visual chin protrusion, and cervicofacial lift [7].

Therefore, the present article aimed to present and register the facial liposculpture optimization techniques as an important aesthetic tool for dental surgeon.

Protocols - liposculture techniques State of the Art of Facial Liposculpture Technique

The idea of the technique arose to solve the problems of changes in the fat pads of the face that occur over the years and with age (Volume Theory). Knowing that the face has fat compartments and these change in size with age and weight gain. The objective is to functionally restructure the surface of these fatty pads, without disrupting them.

Anatomically, we work on the surface of the cushions, between the dermis and the SMAS (Superficial Musculo-Aponeuro¬t¬ic System) remodeling it in volume or even redesigning the cushions if anatomically necessary to give a more youthful appearance to the face, or a lighter appearance, or even changing ethnic characteristics.

It is also possible to treat bumpy and malformed faces that have functional alterations of the fat pads. Thus, the main objective is to correct the functionality of the stomatognathic apparatus that has changed over time and that may interfere with its functioning, and as a corollary of this a significant aesthetic achievement.

Faces very rounded or without contours in the middle third of the face and that we often chose to do the bichectomy as a technique that provides the aesthetic redesign of the face, today we do facial liposculpture and maintain the local integrity of the bichat ball that is as valuable as damper and lubricator between facial muscles. And even as it is a huge source of undifferentiated mesenchymal cells, keeping the bichat ball intact is an option for future cell therapy. Therefore, the technique was based with considerable rigor on anatomical and functional study.

Technique - Main Approaches

The technique itself consists of remodeling the

surface fat pads of the face in order to restore the lost design over the years and or weight gain. The Volumetric Theory tells us that with fat pads they get out of position and increase in volume and this increase in volume makes the face look aging.

If there is an aspect of lack of definition in the design, then it is necessary to remodel these fat pads before any orofacial harmonization technique. Before, filling techniques and support thread techniques were used. This traction by support threads for the fatty pads that have come out of position, is not very effective for repositioning, because due to the weight, which the volumetric theory tells us, it does not stay in the traction position by the thread for a long time due to the weight.

The Facial Liposculpture technique was created exactly to reshape these heavy faces. As there were no specific instruments, so we created the entire line with the company Supremo instrumentals. The specific instruments on which I sign for him were developed with features designed for the safety and quality of the design provided by the technique.

Technique Step-by-Step

For the excellence of any technique, technical planning is paramount, so today, the patient's face drawing is planned in detail, taking into account the anatomical areas to be redrawn. Taking into account the bone, skin, muscle anatomical structures. Liposculpture work really is as the name says, a fat sculpture being the whole work performed on the surface of the pads without the slightest concern, as the pads are structurally preserved.

After the initial planning, a clinical evaluation is carried out in a thorough, visual and handling way to evaluate the characteristics of the fat, volumes, local anatomical structures. All the peculiarities of each patient. It is the planning phase that takes into account the chronological physiologies that you want to achieve in order to give a more youthful appearance and in order to reposition the tissues. Thus, within the planning of the design to be executed, the following step-by-step is shown in **Table 1**.

 Table 1. Technique step-by-step.

~	A line from the Tragus to the labial commissure is drawn, then, with the patient standing, the appropriate line for drawing the ideal malar is drawn;
~	The labial commissure is marked (we ask the patient to smile and draw the limits of the musculature. The intersection of the malar line with the line from the tragus to the commissure will be exactly the region where excess fat will be removed to draw the blush area;
~	After sculpting the blush area, the area of the greasy mouth pad is sculpted, modifying the design that has changed over time. Usually, the technique in this region is a flattening of the surface, leaving the surface of the cushion flatter, giving it a lightness characteristic;
~	Then, the professional goes to the posterior malar fat pad region where it is remodeled, removing excess fat on the surface, thus leaving the face thinner and the jaw angle more evident;
~	Then, the professional goes to the temporal fat pad region, noting that all these areas are liposuctioned using the incision in the tragus region to introduce the cannula.

In the face region, a 1.25-inch multihole cannula is used to sculpt and in the blush area, we finish the curvature of the design close to the nasal region, with the 1.25-inch curved multihole cannula (developed by the author of the present work, in such a way that it can be if you make the same level of curvature of the face design on both sides).

The incision in the tragus region is performed with a blade 11 and 5 mm in front of the tragus. Through this same narrow path, it is also possible to access the medial and medial malar region, where some patients have excessive or deformed volumes.

The technique for accessing the temporal region is also performed by tragus and the work on this cushioned surface is more delicate but safe, as it is always worked at the level of subcutaneous fat and with pinching and pulling the fat away from the SMAS, where they are located. all noble structures, and in this area one is attentive to the delicate movement, as there is a superficial temporal artery that passes at the level and is protected by the SMAS.

What makes the technique safe is the fact that we currently have specific instruments for the face region, which are quite delicate and do not need to move the cannula inside the fat as is done in regions with greater volumes of fat. In the face region, there is the movement of fat over the cannula, without the slightest sudden movement of the cannula. This makes the technique very safe. Of course, the professional needs excellent technical and scientific training. The other regions of the face can be aspirated, but they require different points of entry for the cannula.

In the revision of the nasolabial fat pad, it is necessary to make a narrow path in its alignment, which is transversal to the narrow path in the tragus region. So, especially for this cushion, a narrow path is made in the direction of the labial commissure with an 18 G needle, and from this, the surface of this cushion is flattened, leaving them lighter and giving a younger face feature.

In the region of the fat pad of the lower eyelid, it also needs to make a differentiated narrow path. In the evocation region, 10.0 mm outwards and 10.0 mm downwards, the narrow path is carried out to access the fat pad of the lower eyelid in a parallel way, thus removing excesses from the surface of this pad.

Liposuction Technique (Liposculpture)

The liposuction technique, also called Liposculpture, consists of using a cannula with the motor attached to suck this fat exactly as it is done in plastic surgery or with a syringe and lock connected. The 20 mL syringe with a lock.

When the lock is pulled with the syringe plunger, it creates a vacuum (negative pressure) inside this syringe, so in the entire face region, we work with the syringe and the lock without a motor. The use of the motor for aspiration is only allowed in the submental and submandibular regions, regions with larger volumes of fat where safety allows this use. The secret of the Facial Liposculpture technique (SV lipoSuction Face) is that it always works with fat pinching and a syringe for aspiration, thus making the technique safer and less traumatic.

With face techniques, it is possible to access the entire face of the patient, for reviews and sculpting with total safety, and predictability, without the need for hospital admission, with low morbidity, high security, without scars, with predictability and very satisfactory results of a redesign in a single query.

In the mandible base region, the narrow path technique is used in the region below the chin (2.0 mm after bone structure), initially with an 11.0 blade of 22.0 mm in length and with the 2.5 mm multihole cannula, the design of a base of the mandible with complete safety the complex anatomical structures that pass in this region (facial artery and vein, submandibular gland, facial nerve), as the cannula was also designed to break up the fat without the need to move the cannula, but only the fat which is aspirated by a 20 mL syringe.

Today it is possible to design an entire face with total security because in addition to specific cannulas, there are very strict protocols for handling the fat, highlighting the same from the SMAS, and working the redesign away from the deep planes. Of course, any technique wants intensive training and rigorous protocols, which is why a step-by-step approach was developed to achieve patient satisfaction and comfort results. The step-by-step of this technique is listed below (**Table 2**).

 Table 2. Technique Step-by-Step.

1. Clinical and health assessment of the patient;
2. Assessment of local anatomical structures;
3. Adequate local surgical planning;
4. Draw the patient's face with the intended drawing plan;
5. Anesthetic button in the incision region;
6. Incision with a 2 mm blade 11;
7. Introduction of the 1.25 mm multi-hole cannula in the superficial region of the fat pad from which fat will be removed,
and this is done under local anesthesia, using Klein's Solution, according to Jeffrey Klein 1987 [8].
8. Anesthesia is performed in the face region and performed with a technique developed by the author of the present
work, using a substance called Klein's solution. In the face region, the technique is called Localized Moisturizing
Anesthesia (own authorship);
9. Klein's solution is placed in the region to be liposuctioned;
10. Anesthesia is performed by placing the solution only to hydrate without even making the volume in the region and
in this hydrated region the Liposculpture process begins with the 1.25 mm multi-hole cannula with a syringe and attached
lock, the vacuum is performed and the Liposculpture process begins. On the face, it is simply a movement of the fat
over the cannula, there is no movement of the cannula inside the fat, but the fat comes to the cannula working as if it
were a fat shredder, drawing and making the desired sculpture.
11. For each region, a specific technique is used in the middle third of the face where the blush area is to be highlighted,
a technique is used to create a link in the region marking an area in the malar region.
12. In the temporal and in the malar, a flattening drawing is made, decreasing the surface volume.



13. In the region of the posterior malar fat pad, a 2.5 mm cannula is used to remove fat from the surface of the entire pad, including the angle of the mandible.

14. The entire angle is redrawn, showing the patient's bone structure with complete safety, making a physiological redesign.

15. Once one side has been executed within the required sculpting standards, the opposite side will be executed by executing the same drawings, taking into account the operated side as the model.

16. All surgery is performed on the opposite side and one side is compared with the patient standing or sitting in the chair so that you can visualize the drawing equivalent to sculpture from one side to the other.

17. Drainage is performed in the entire region, which consists of pressing the skin against the SMAS, so that all liquid, all the fat that may have remained on the inside is drained. Space needs to be ready for skin repair adhering to the deeper region.

18 Suturing was performed in the narrow paths using 5.0 nylon thread. single point.

19 The photos are taken both pre, trans, and postoperative to protect and visualize the before and after of the patient a surgical comparison of the technique.

20. After this surgical procedure, we move on to the technique of bandaging the face using the tape, a tape created in 1973 by Professor Kenzo Kase who created an elastic tape made of cotton and polyamide with the adhesive, which is placed in regions to promote compression and drainage for example.

21. This tape is placed, promoting a specific design of the operated region, making the contour of the operated region. It is cut in octopus or fan format.

22. On-site, it has the function of pressing the tissues to facilitate an adequate repair and also to promote lymphatic drainage immediately in the postoperative period.

23. 07:13 - 07:34: Emphatic to face specific pressure-specific stresses.

24. LipoTaping, as the name of the protocol was given, has specific rules that are very scientifically and clinically consolidated. On the face, 50% tension is used and 100% lateral and the base of the mandible. This process provides the initial stability of the tissues, facilitating the repair process, and also provides the beginning of lymphatic drainage, leaving the region without accumulation of liquid residues below the skin, thus having a powder without edema and hematoma;

25. This bandage is made from the face to the patient's cervical region, thus preventing the accumulation of fluids and the patient's feeling of edema.

26. After LipoTaping has been performed, a compressive splint is placed to promote greater local pressure, preventing tissue movement and facilitating the formation of the fibrin network that occurs in the first 72 hours.

27. LipoTaping should be maintained for 72 hours and after starting the process of manual lymphatic drainage and functional tissue release.

27. In 10 days, the suture is removed and the evolution of local tissues is monitored.

28. Compression bandages should be used for 15 to 30 days.

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Conflict of interest

The authors declare no conflict of interest.

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References

- Saad A, Altamirano-Arcos CA, Nahas Combina L, Saad M. Power-Assisted Liposculpture in Male Patients: A Spectrum of Definitions. Aesthet Surg J. 2021 May 18;41(6):NP447-NP455. doi: 10.1093/asj/sjaa435. PMID: 33400776.
- Charles-de-Sá L, Gontijo-de-Amorim NF, Coleman S, Rigotti G. Regen Fat Code: A Standardized Protocol for Facial Volumetry and

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 Rejuvenation.
 Aesthet
 Surg
 J.
 2021
 Oct

 15;41(11):NP1394-NP1404.
 doi:
 10.1093/asj/sjab016.
 PMID: 33453100.

- Egro FM, Coleman SR. Facial Fat Grafting: The Past, Present, and Future. Clin Plast Surg. 2020 Jan;47(1):1-6. doi: 10.1016/j.cps.2019.08.004. Epub 2019 Oct 21. PMID: 31739886.
- **4.** Farkas JP, Pessa JE, Hubbard B, Rohrich RJ. The science and theory behind facial aging. Plast Reconstr Surg Global Open. Apr 2013;1(1).
- Habbema L. Liposculpture of the aging face and neck. J Cosmet Dermatol. 2005 Sep;4(3):198-203. doi: 10.1111/j.1473-2165.2005.00312.x. PMID: 17129267.
- 6. Haack J, Friedman O. Facial liposculpture. Facial Plast Surg FPS. May 2006;22(2):147e153.
- Yang WC, Shih PK, Wu DW. The benefits of liposculpture in cervicofacial rejuvenation: A review of 312 consecutive patients. Asian J Surg. 2019 Nov;42(11):974-975. doi: 10.1016/j.asjsur.2019.07.012. Epub 2019 Jul 23. PMID: 31345656.
- Klein JA. The Tumescent Technique for Lipo-Suction Surgery. The American Journal of Cosmetic Surgery. 1987;4(4):263-267. doi:10.1177/074880688700400403.



