Research Article

iMedPub Journals
www.imedpub.com

Journal of Aesthetic & Reconstructive Surgery
ISSN 2472-1905

2023
Vol.9 No.4:164

Elastic Neck Lift with Three Threads and Four Safety Pins: A New Approach to Neck Lifting

Sergio Capurro*

Department of Plastic Surgery, Capurro Clinic, Genoa, Italy

Corresponding author: Sergio Capurro, Department of Plastic Surgery, Capurro Clinic, Genoa, Italy, E-mail: sergio.capurro@hotmail.it

Received date: November 24, 2023, Manuscript No. IPARS-23-18157; **Editor assigned date:** November 27, 2023, PreQC No. IPARS-23-18157 (PQ); **Reviewed date:** December 11, 2023, QC No. IPARS-23-18157; **Revised date:** December 18, 2023, Manuscript No. IPARS-23-18157 (R); **Published date:** December 25, 2023, DOI: 10.36648/2472-1905.9.4.164

Citation: Capurro S (2023) Elastic Neck Lift with Three Threads and Four Safety Pins: A New Approach to Neck Lifting. J Aesthet Reconstr Surg Vol.9 No.4: 164.

Abstract

Background: Although surgical techniques for neck correction yield good immediate post-operative results, persistent results are not achieved over time. Even if the anterior region of the neck is completely dissected and the platysma manipulated, the medium and long-term results are often unsatisfactory. Moreover, these procedures are demanding, traumatic, can create iatrogenic deformities and sometimes require long post-operative recovery. Using the two-tipped Jano needle and elasticum thread, the tissues of the cheeks and neck are not dissected, but simply repositioned under local anesthesia. Here, we present a technique for elastic lifting with safety pins that is simpler than the previous technique and permanently eliminates the most evident defects of the neck.

Methods: Sagging neck skin is largely due to ptosis of the cheeks, which we corrected by elastic MACS lifting. After the vertical ptosis of the cheeks has been corrected, if a poorly shaped neck remains, we can perform elastic neck lifting with three threads and four safety pins. Once joined together, the three elastic threads eliminate the vertical folds of the neck, lift the low horizontal folds and restore the profile of the cervico-mandibular angle.

Conclusion: Elastic neck lifting with three threads and four safety pins is a simple technique that enables the main defects of the anterior region of the neck to be corrected under local anesthesia. In addition to restoring the cervico-mandibular angle, this new operation enables elimination of unsightly vertical folds of the neck without any need for tissue dissection or manipulation.

Keywords: Anterior neck flaccidity; Neck rejuvenation; Neck lift; Platysmal bands; Cervico-mandibular angle; Submental liposuction; Elastic neck lift; Elastic MACS lift; Elasticum thread; Jano needle

Introduction

The objective is to obtain a neck with a well-defined cervico-mandibular angle and without unsightly vertical folds. Unfortunately, this objective does not seem to be achievable in a stable manner. Traditional neck lifts often yield disappointing short or long-term results that do not reflect the operator's efforts (extensive dissection and manipulation of the platysma) [1]. Patients who undergo these operations must be prepared to accept a high risk of iatrogenic deformities and there is a significant risk of failure to maintain the results in the long-term [2].

Even in the least invasive operations, such as closed platismotomy, the bands can recur [3]. Labbé, et al., [4] developed a technique in which the platysma is sutured to fascia of Loré'. Fogli, et al., [5] described a method of anchoring the platysma muscle to the prelobar fibrous tissue of Lore's fascia. Gonzalez [6] then utilized an overlapping plication of the platysma. After vertical incision and blunt dissection, the lateral edge of the platysma muscle is pulled posteriorly and cephalically and fixed just below the mandibular angle.

Extensive dissection and manipulation of the platysma can cause post-operative hematomas, which can lead to skin necrosis. Smoking also increases the risk of necrosis. For these reasons, we have eliminated dissection from our neck-lifting procedures, just as we eliminated it in lifting the cheeks [7,8].

Using elastic thread mounted on a two-tipped needle, we reposition the neck tissues under local anesthesia. Elastic neck lifting with three threads and four safety pins is the most recent elastic lifting procedure with safety pin lifts and follows the 8-pin neck lift [9]. Its efficacy is comparable to implantation of the elastic thread between the two fasciae of Loré performed at the same time as horizontal liposuction of the neck [10].

Sagging neck skin is often caused by ptosis of the cheeks and can be corrected by elastic MACS lifting alone **(Figure 1)**. In patients with moderate ptosis of the face and neck, we normally perform elastic MACS lifting and simple elastic neck lifting, which is achieved by implanting an elastic thread between the two fasciae of Loré.

This thread is implanted through the same access used for the elastic MACS lift. In patients with severe ptosis of the face and neck, elastic MACS lifting and elastic neck lifting with three threads and four safety pins can be performed during the same session.

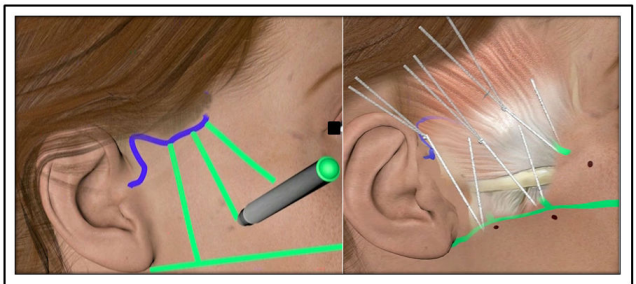

Figure 1: Elastic MACS lifting is performed at the same time as or before elastic neck lifting. The cheeks are not dissected. The elastic thread is used to create three isosceles triangles, which lift the cheeks and malar region vertically. All removable temporal skin is removed.

Materials and Methods

The patient in **Figure 2** had undergone face and neck lifting 6 months prior. Lifting of the cheeks had been quite effective, as the skin at the sideburn could not be pinched between the fingers. In contrast, the neck lift had left evident ptosis of the tissues, platysmal folds and no definition of the cervico-mandibular angle. Under local anesthesia horizontal liposuction of the anterior excess fat will be performed and three elastic sutures (Elasticum EP 3.5 Korpo) will be implanted in the neck. The elastic thread equipped with a two-tipped needle repositions the skin and subcutaneous tissues, restoring the aesthetic conformation of the neck. The thread is impalpable and colonized by connective tissue cells, became a "ligament", stabilizing the result.

Figure 2: This patient underwent traditional lifting of the face and neck 6 months prior to this image. The neck is still deformed and presents vertical folds.

Pre-operative design

A vertical line is drawn in the center of the neck. Two small lateral lines are then drawn on the line that represents the future cervico-mandibular fold, corresponding with the vertical projection of the labial commissures **(Figure 3)**. Between these two lines, the first elastic thread is implanted. At the ends of the lateral elastic threads, two traction loops are created, which eliminate the vertical folds of the neck skin. To draw the cervico-mandibular angle, the patient bends their neck and the tissues over the angles of the mandible are pulled upward. This line runs outward to the corner of the jaw and extends to the fascia of Loré. The return path of the elastic thread reaches the loop of the central elastic thread. The two lateral elastic threads are parallel and about 1 cm apart.

Figure 3: On the line of the cervico-mandibular angle, the central elastic thread is between the vertical projection of the labial commissures and the two lateral elastic traction threads. Above the threads an area that will be liposuctioned horizontally.

Local anesthesia

A local anesthetic containing adrenaline (1/2 mg adrenaline in 10 ml 2% lidocaine) is injected behind the earlobes first and then above the fascia of Loré. A dilute solution of anesthetic is injected along the pathway of the elastic threads and finally in the areas where excess fatty tissue was palpated **(Figure 4)**.

Figure 4: An anesthetic solution containing epinephrine was injected behind the earlobe and above the fascia of Loré. A diluted anesthetic solution was injected along the pathway of the elastic threads and into the area to be liposuctioned.

Horizontal liposuction

Horizontal liposuction is performed through a hole made by a 16 G needle or a small skin incision. A 2 mm or 2.5 mm diameter cannula is used **(Figure 5)**. After neck liposuction, compression is needed for 2-3 weeks.

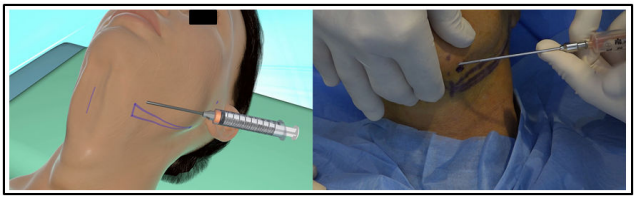

Figure 5: Horizontal liposuction was performed using a 2 mm or 2.5 mm-diameter cannula and a 10 ml syringe. All possible fat was aspirated.

Implanting the central elastic thread

The central elastic thread is implanted between the two small lateral lines to correspond with the vertical projection of the

labial commissures. With a 16 G needle, a hole is made on each of the two small lateral lines. A fine-tipped Klemmer is used to dilate and deepen the holes **(Figure 6)**.

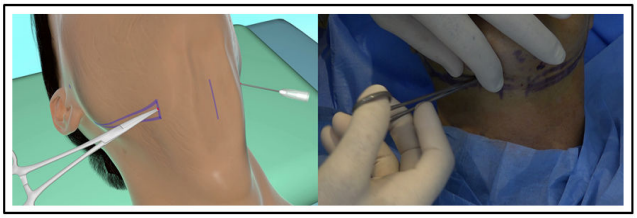

Figure 6: A hole was made with a 16 G needle at the two ends of the design of the central thread. The holes were dilated and deepened by the tip of a fine Klemmer.

The Jano needle is inserted perpendicularly into the entry hole to a depth of just over 5 mm. The needle then travels horizontally, partially exiting from the hole at the other end, where it is extracted up to the 5th depth mark. The tip is moved slightly to the side and the needle returned to the entry hole **(Figure 7)**, where it is completely withdrawn.

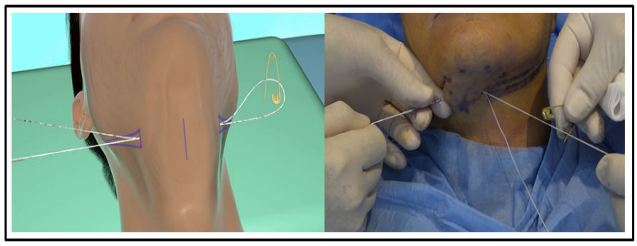

Figure 7: The central elastic thread was implanted using the two-tipped Jano needle. The first safety pin was inserted.

A safety pin is used to hold the thread outside the hole. The two ends of the elastic thread are knotted without traction. The elastic thread is held outside the entry hole by a second safety pin **(Figure 8)**.

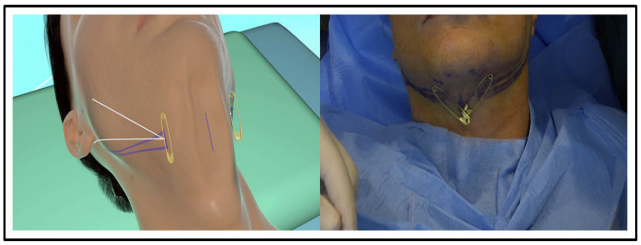

Figure 8: The elastic thread was knotted without being placed under tension. Safety pins kept the elastic thread out of the holes.

Implanting the lateral elastic threads

Next, the two lateral elastic threads are implanted. The operator makes an 8 mm incision behind the earlobes. Using scissors, the operator lifts the tissues immediately above Lore's fascia **(Figure 9)** and inserts a retractor.

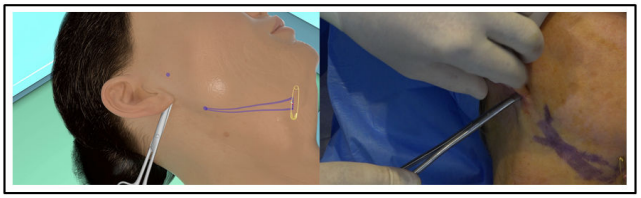

Figure 9: Through an 8 mm incision in the angle behind the earlobes, the operator used scissors to dissect a few centimeters of the tissues immediately above Lore's fascia.

The Jano needle enters the small incision and anchors the elastic thread tangentially in the fascia **(Figure 10)**. The needle is partially extracted up to the fifth depth mark, rotated and follows the pre-established pathway in the subcutaneous tissue, passing outside the corner of the jaw **(Figure 11)**.

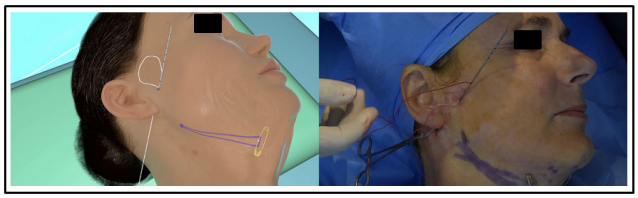

Figure 10: With the aid of a retractor, the operator used the Jano needle to tangentially anchor the elastic thread to the fascia of Loré.

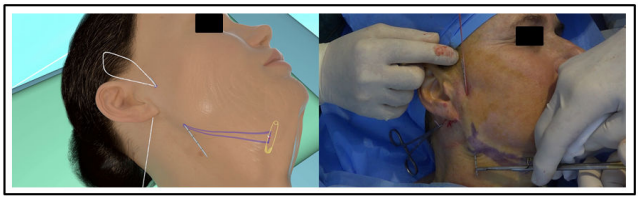

Figure 11: The two-tipped needle was extracted up to the fifth depth mark, rotated and partially exited the skin external to the mandibular angle.

Once beyond the jaw, the two-tipped needle is extracted up to the fifth depth mark, rotated and follows the previously drawn line, partially emerging from the hole. During the procedure, the operator makes up/down movements with the Jano needle to check that no skin introflections occur. The elastic thread is pulled through. As always, a Klemmer is attached to the end of the thread. The Jano needle is extracted until just over 5 mm remains in the tissue. It is then tilted and changes direction to create the traction loop **(Figure 12)**.

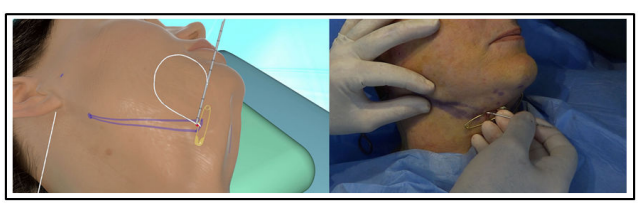

Figure 12: The Jano needle partially emerged from the hole. The elastic thread was pulled through. The posterior tip was moved in order to create a loop and then returned parallel to the forward thread.

Once this loop is created, the Jano needle travels parallel to the previously implanted elastic thread, in the direction of the mandibular angle. The distance between the two elastic threads is about 1 cm. The resistance to traction is determined by the tissues situated between the two threads.

After reaching the angle of the jaw, the Jano needle is extracted up to the fifth depth mark **(Figure 13)**, rotated and then reaches the preauricular region, where it partially emerges **(Figure 14)**.

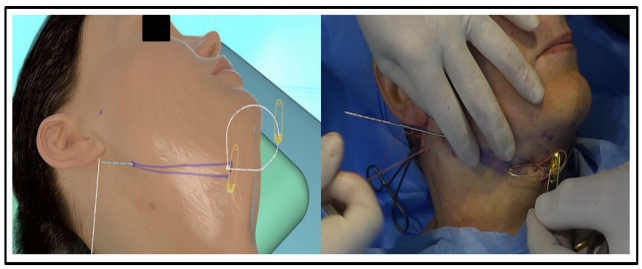

Figure 13: The Jano needle partially exiting behind the mandibular angle. A safety pin kept the elastic thread out of the hole.

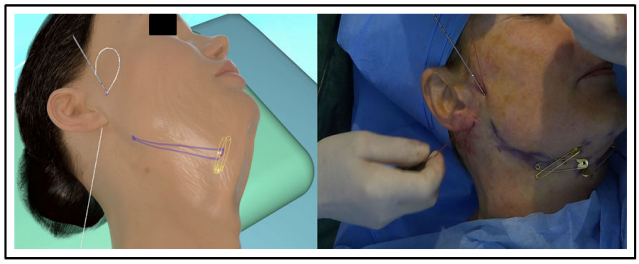

Figure 14: The two-tipped needle was rotated and partially emerged in the preauricular region, where it was withdrawn up to the fifth depth mark.

The Jano needle is extracted up to the last depth mark, tilted and with the aid of a retractor, emerges from the small incision behind the earlobe **(Figure 15)**.

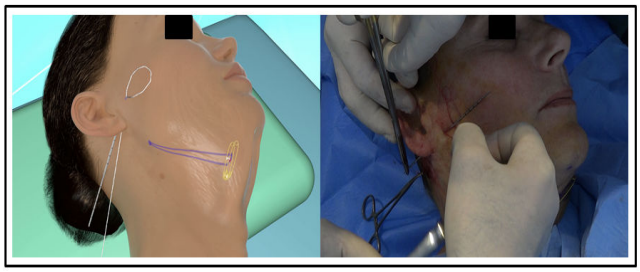

Figure 15: With the aid of a retractor, the two-tipped needle was extracted from the small incision behind the earlobe.

Joining the three threads

The elastic threads (central and lateral) are joined by a 3-0 polyester thread **(Figure 16).** The safety pins are removed and the knot pressed deep into the hole **(Figure 17)**.

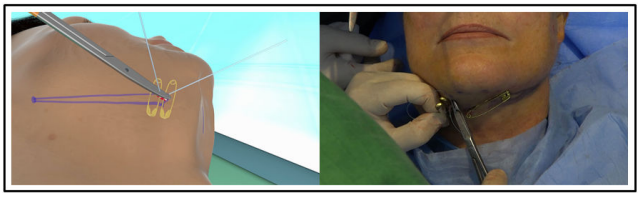

Figure 16: A 3-0 polyester thread connects the two elastic threads, which were held out of the skin hole by safety pins.

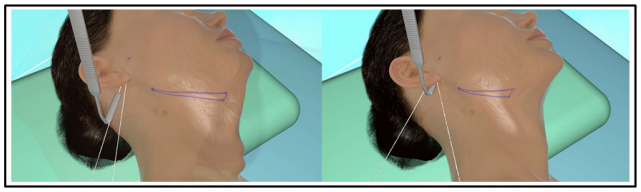

Figure 17: The safety pins were removed, the polyester knots that connect the three threads were pressed deep into the skin holes and the ends of the elastic threads were pulled firmly and knotted.

Under the guidance of a retractor, the two ends of the elastic thread are firmly pulled and knotted. The small incision behind the earlobe is sutured with a rapidly absorbable thread to end the procedure.

Results

The tissues were repositioned and the neck regained its youthful shape **(Figures 18 and 19)**. The patient applied an antibiotic ointment until the rapidly absorbable stitches fell out spontaneously.

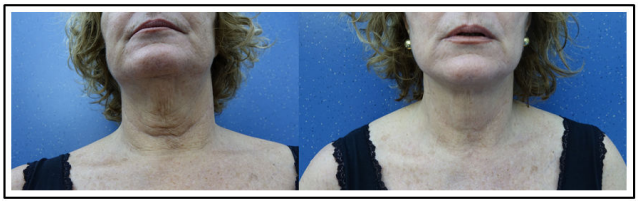

Figure 18: Restoring the cervico-mandibular angle smoothed out the low anterior horizontal wrinkles of the neck. The two lateral traction threads eliminated the unsightly vertical folds.

Figure 19: After 2 years, the cervico-mandibular angle remained unchanged.

In the twenty-two procedures performed thus far, the results have been satisfactory and persistent over time. In two patients, neck lifting was completed with excision of a vertical lozenge of skin and fat extending from immediately under the chin up to the new cervico-mandibular angle. In one patient with very flaccid skin, we enhanced the volume of the mandible by adipofilling with small lobular fragments, obtaining a good result. In one patient with low hyoid bone, we implanted another elastic thread between the two Lore's fascia to further define the cervico-mandibular angle. In two patients, roughness of the lower neck skin was treated with cellular adipofilling via intradermal injection [11].

Discussion

Sagging of the cheek skin impacts both the neck and the edge of the jaw. The vertical component of gravitational ptosis is corrected by performing elastic lifting of the middle third [12] and, if the tissues at the sideburn can be pinched between the fingers, by elastic MACS lifting **(Figure 1)**. In elastic MACS lifting, the temporal region is dissected up to a point just beyond the zygomatic arch and all excess skin removed. Elastic lifting of marionette wrinkles [13] corrects any oblique laxity of the cheek. If there is excess skin, the pre-auricular skin is removed without dissection. Elastic neck lifting with three threads and four safety pins can be performed through the incision used for elastic MACS lifting by creating a tunnel immediately above the fascia of Loré. This new neck-lifting technique is most frequently performed through an 8 mm skin incision behind the earlobes. The main indications are the presence of excess neck tissue, vertical platysmatic folds and the absence of a cervico-mandibular angle.

Conclusion

The techniques that we are developing are part of what we call elastic plastic surgery. Interventions on the face and especially the neck are becoming popular in Italy and South Korea [14]. In elastic facial surgery, the most important consideration is that, no dissection of the neck and cheek is required.

References

1. Pelle-Ceravolo M, Angelini M, Silvi E (2016) Complete platysma transection in neck rejuvenation: A critical appraisal. Plast Reconstr Surg 138: 781-791.
2. Batniji RK (2014) Complications/sequelae of neck rejuvenation. Facial Plast Surg Clin North Am 22: 317-320.
3. Daher JC (2011) Closed platysmotomy: A new procedure for the treatment of platysma bands without skin dissection. Aesthetic Plast Surg 35: 866-77.
4. Daniel L, Franco RG, Nicolas J (2006) Platysma suspension and platysmaplasty during neck lift: Anatomical study and analysis of 30 cases. Plast Reconstr Surg 117: 2001-2007.
5. Fogli A, Desouches C (2008) Less invasive face-lifting: Platysma anchoring techniques. Clin Plast Surg 35: 519-529.
6. Gonzalez R (2014) The LOPP-lateral overlapping plication of the platysma: An effective neck lift without sub-mental incision. Clin Plast Surg 41: 65-72.
7. Hodgkinson D (2021) Total neck rejuvenation, harnessing the platysma in the lower neck and décolletage. Aesthetic Plast Surg 46: 161-172.
8. Capurro S (2017) Basic elastic MACS and neck lift without dissection of the cheeks and neck, step-by-step. CRPUB Medical Video Journal. Elastic plastic surgery section.
9. Capurro S (2017) Elastic lifting of the neck with safety-pins, without neck dissection and without skin removal. CRPUB Medical Video Journal. Elastic plastic surgery section.
10. Capurro S, Rava C (2013) Liposuction and immediate implantation of an elastic thread between the two fasciae of Loré to treat a double chin. CRPUB Medical Video Journal. Elastic plastic surgery section.
11. Capurro S (2018) Subcutaneous volumetric Adipofilling® and intradermal regenerative Adipofilling for the treatment of wrinkles and aged skin. CRPUB Medical Video Journal. Adipofilling section.
12. Capurro S (2007) Elastic lifting of the cheeks without blunt dissection. CRPUB Medical Video Journal. Elastic plastic surgery section.
13. Capurro S (2022) Elastic lifting of marionette wrinkles. J Aesthet Reconstr Surg 8: 1-5.
14. Hwang K, Kim H, Kim YR, Na Y (2016) Improvements in the cervical angle and anthropometric distances using elasticum suspension. Plast Aesthet Res 3: 384-389.