

“The Chignon Mastopexy”: A Double Glandular Suspended Flaps for an Auto-Augmentation Effect

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Abstract

Background Many mastopexy techniques have been described in the literature focusing on the new nipple areolar complex position and the breast deflation treatment, but only few of them detailed the glandular volume redistribution to avoid the use of implants. We describe a mastopexy procedure that brings the maximum of the volume to the central part of the breast. We compare the procedure to a “chignon” hair style way to vulgarize the technique and simplify its comprehension.

Methods Breast volume is reshaped by the use of a vertical mastopexy and two deepithelized glandular flaps sutured for the first one to the pectoralis major fascia and for the second one to the contralateral flap. A lateral release of two fasciocutaneous flaps allows the final vertical suture.

Results From January 2011 to January 2016, 30 patients, between 85 operated on for ptotic breasts, were treated with this technique. The follow-up period is from 6 months to 5 years. Esthetic improvement in the breast shape and its projection were achieved in 90%. The illusion of augmentation of the final volume was noticed in 70% of the cases. No complications were noticed during this study.

Conclusion We describe an easy and reliable technique for breast lift, based on a mastopexy method that changes the architecture of the breast to bring the maximum of its

volume to the central part. The technique is rewarding for moderate volumes when the ptosis is more related to a glandular sagging than to a cutaneous looseness and breast deflation.

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Keywords Breast · Mastopexy · Breast lift · Auto-augmentation · Flaps · Breast gland

Introduction

Different techniques, different combinations, different incisions and different pedicles have been described for mastopexy proving how challenging this procedure can be. Upper pole volume redefinition without the use of implants or fat grafting and stable results are the most important goals while performing an auto-augmentation mastopexy.

In this paper, we describe a personal technique inspired from the “mastopexy” etymology involving the gland (masto) and the surgical fixation (pexy) and the ancient Athenian women’s hairdressing style concentrating their hair volume in the vertex area by different suspension maneuvers called chignon (Scheme 1).

Surgical Technique

We mark the new nipple areola complex (NAC) position with a patient in a standing position and simulate the breast lift by a simple pinch test of the lower breast and a

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Scheme 1 An example of a chignon hairdressing

Biesenberger maneuver [1, 2]. We draw our two lines from the new NAC to the inframammary fold (IMF) centered by the breast meridian in an orange slice.

We check our drawing with the patient in a supine position after general anesthesia. The internal line curved in a standing position has to become straight.

We operate on the patient in a semi-setting position. We start with an entire desepidermization of the orange slice area and the individualization of the superior pedicle (Fig. 1). We harvest the pedicle and thin it for a better inset and release the NAC in the lateral borders of the pedicle to prepare it for its new position without any tension.

We make a vertical incision in the lower breast separating two glandular flaps to the pectoralis major fascia.

We create a pocket behind the new NAC position that will receive the glandular flaps (Fig. 2).

We realize a solid modified Kessler stitch [3] with an absorbable Vicryl© 2/0 taking the external glandular flap summit to the pectoralis major fascia after realizing a 45°–90° rotation of the flap to place it behind the new NAC position (Fig. 3).

Different stitches are then placed between this external flap and the second internal flap that will come cover it (Fig. 4).

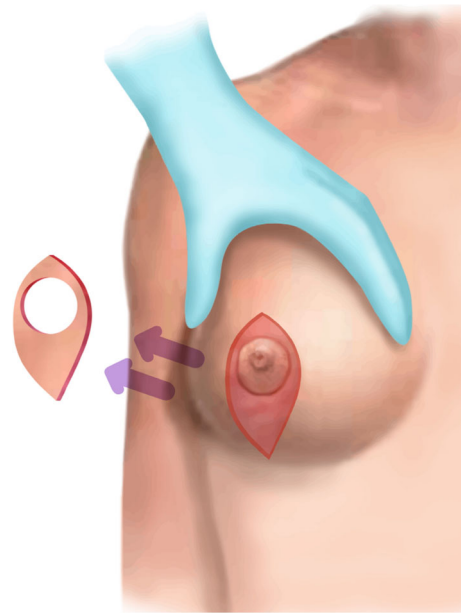


Fig. 1 Desepidermization in an orange slice

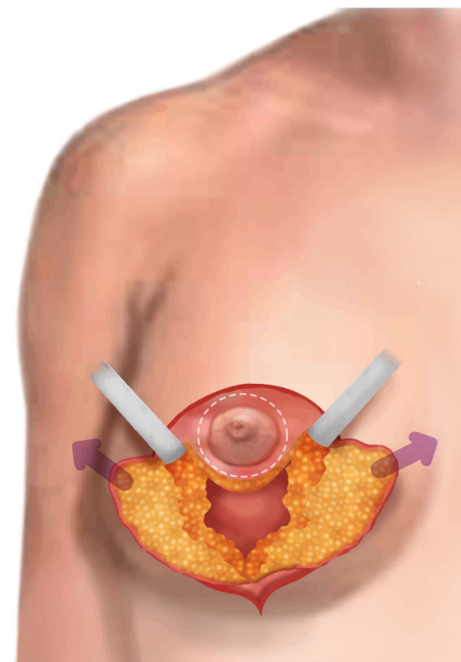


Fig. 2 A vertical incision on the lower breast is done and an individualization of two glandular flaps is performed after the release of the superior pedicle

We release the fasciocutaneous flaps on both sides until we obtain a stable non-retracted cutaneous envelope. (Fig. 5).

We close the vertical lift in a double layer with MONOCRYL© 3/0 without any drains.

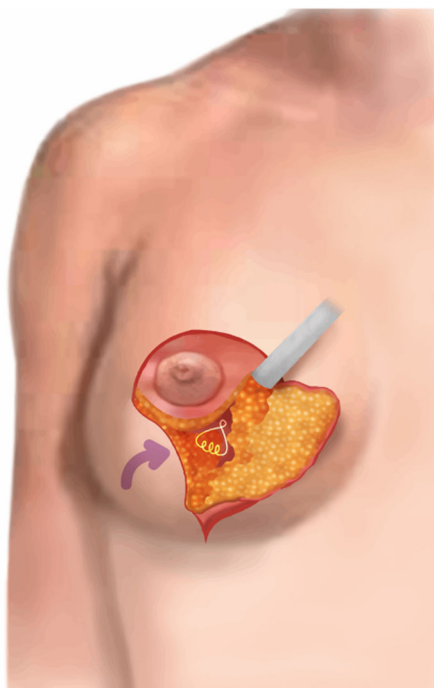


Fig. 3 The external glandular flap is rotated first, here at 45°, to be sutured with a modified kissler stitch to the pectoralis major fascia behind the new NAC position (Note that a 90° rotation of the flap from down to up and from outside to inside may be a variation of the technique if there is a need of an elevation of the IMF.)

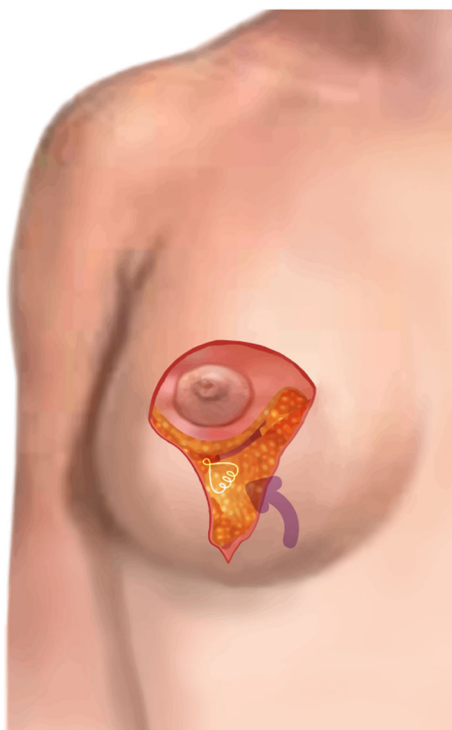


Fig. 4 The internal glandular flap is sutured to the external one with different sutures and without tension



Fig. 5 A release of two fasciocutaneous flaps is realized to close the chignon technique without tension or dead space

The NAC is then sutured in two layers without tension in its new position on the top of our “chignon” after desepidermization revision.

Dressing and contention are placed for 7–10 days.

Results

This “chignon technique” was performed on 30 patients aged from 25 to 54 years old (average age: 38). The study collected 85 patients operated on for ptotic breasts between January 2011 and January 2016. We performed for the 55 other patients other procedures using a Lassus technique for breast lift [4, 5] in 18 cases and a combined technique with breast lift and silicone prosthesis in 37 cases.

We did not observe any complications like hematoma, NAC necrosis, infection or suture dehiscence using this technique (Figs. 6 and 7).

Two cases of skin retraction were noticed in the end of the vertical suture on the inframammary fold while asking the patient to put her hands up (Fig. 9).

They were due to an important lift of the internal glandular flaps usually sutured on the external ones without tension and dead space. Any dead space between the glandular flaps and the fasciocutaneous flaps may lead to this kind of retraction.

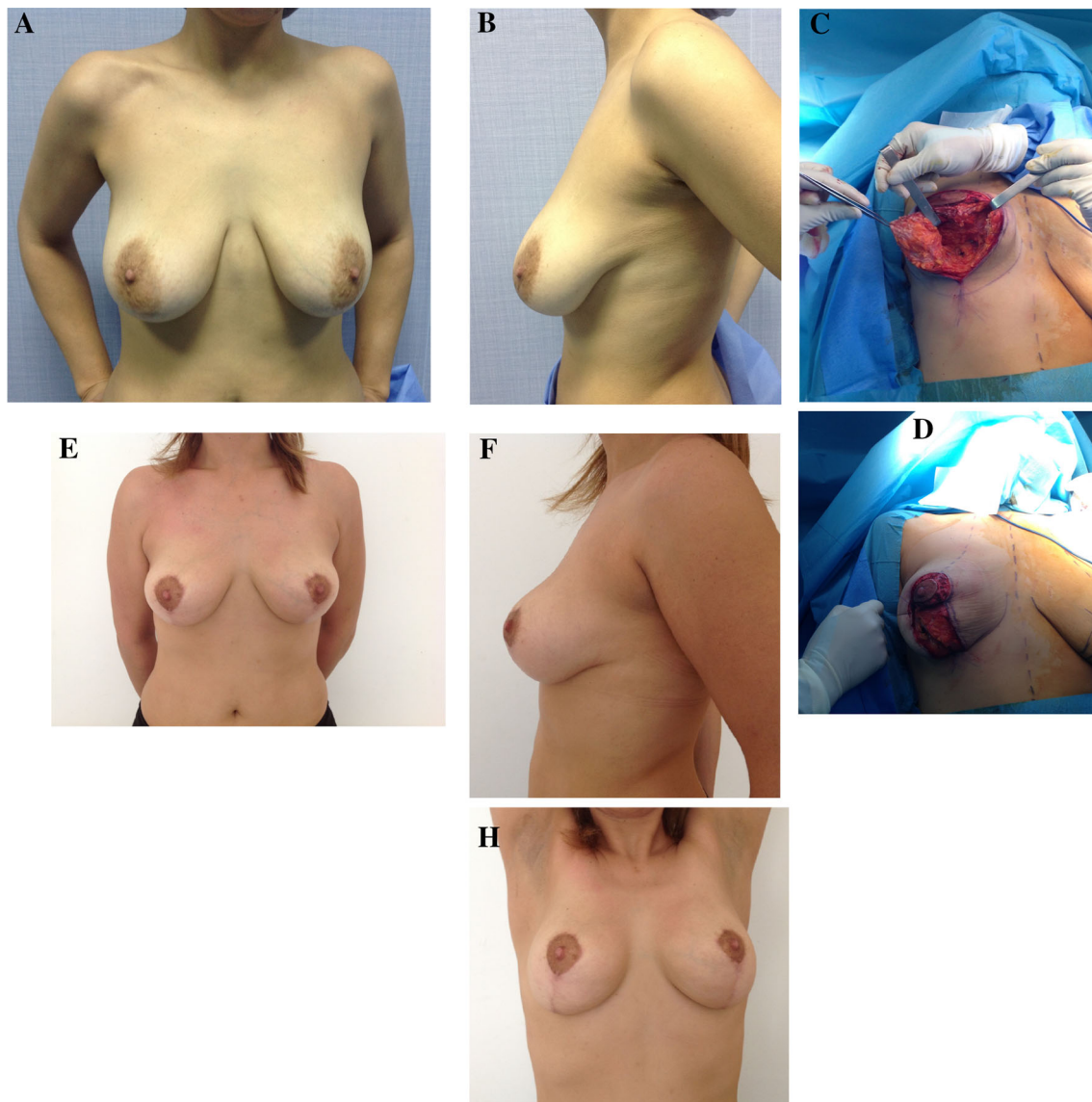


Fig. 6 **a, b**: Frontal and lateral preoperative views of a 36-year-old woman asking for a ptosis treatment without the use of implants. **c, d**: Perioperative views showing the pocket and the glandular flaps

harvested and sutured together. **e, f**: Frontal and lateral views one year after surgery. **h**: Natural shape of the breast without invagination or deflation of the breast

No reports of an eventual cytosteatonecrosis were received from the patients (no nodules observed) or their radiologists during classical checkup or mammography.

One patient reported lateral deflation of the breast due to the important initial glandular volume non-resected during the surgery and not supported by the fascia sutures and the plications.

A systematic evaluation of the final volume is requested for all the patients after 3 months. Twenty-one patients were happy about the final volume augmentation effect produced by this technique. Seven patients were happy about the final result of the ptosis treatment but thought that the technique did not bring any augmentation effect to the initial volume (which is technically true as nothing was

added to the plasty), and three of them asked about an eventual revision with an implant or fat grafting in the future as they expected a bigger volume definition using only “the chignon technique” despite our advice to add fat or an implant to their breast lift request.

Discussion

The most challenging purpose while proposing a mastopexy remains the redefinition of the upper pole. We can divide the breast into two social parts: “the hidden breast” including the NAC and the lower breast and the “exposed

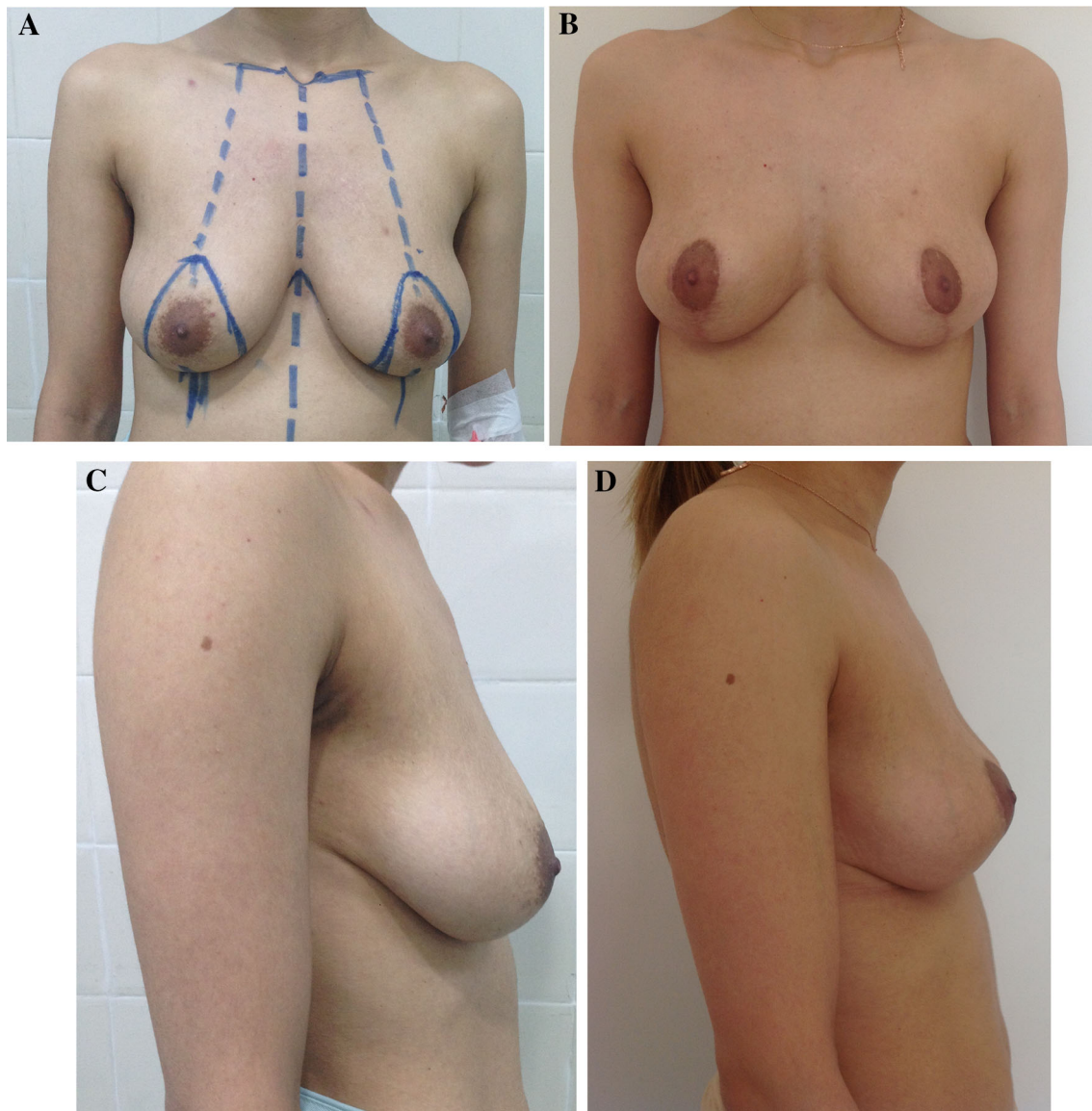


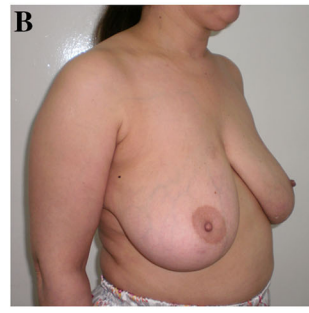
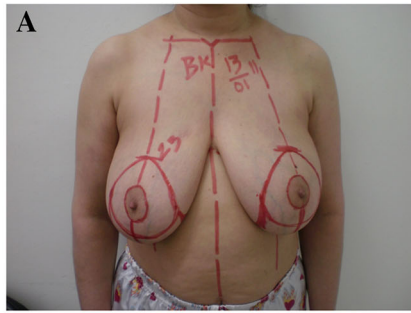
Fig. 7 **a:** A young 28-year-old woman asking for her “former breast” after feeding. **b:** Frontal view one year after the surgery. **c:** Lateral view showing the ptosis. **d:** Stable result with the maximum of projection on a horizontal vector enhancing the NAC level

breast” or “sociable breast” including the upper pole and the décolleté.

All the described techniques will focus on the lower pole to enhance the upper pole in order to hide the scars and redefine the apparent volume of the breast. This purpose is easily reached with the use of implants [6–9], but remains difficult to achieve when your patient is refusing a prosthesis or fat grafting with the breast lift. The idea, then, is to find a technique that simulates a bra effect using suspension and lifting procedures at the same time exploiting breast tissue in different flap harvesting and sutures [10–13] with different, and sometimes original, vascular supplies [14, 15].

The second purpose of such a procedure is to have acceptable long-term results despite the gravity and the breast weight encouraging some surgeons to use the muscle [16], the fascia [17] or a synthetic mesh [18, 19] in order to stabilize their results and avoid ptosis recurrence.

In our approach, we noticed that a simple vertical cutaneous lift without glandular excision leads sooner or later to ptosis recurrence or to a pseudo-ptosis situation like that described by Regnault [20]. Performing the classical breast lifts like the “Lassus vertical technique” can certainly treat the ptosis, but with a volume loss sense. Using this “chignon technique” by changing the architecture of the glandular tissue distribution allows the ptosis treatment and also an impression of a volume augmentation.



◀ **Fig. 8 a, b:** 48-year-old patient with an important ptosis asking to keep an important volume for the breast. **c, d:** One-year results. We noticed the mole (arrow on Fig. 8c) as a reference to check an eventual ulterior ptosis recurrence. **e, f:** Five-year results. We notice a 1 cm recurrence of the breast sagging with reference to the mole (Fig. 8e arrow). This ptosis is finally clarified by an 8 kg weight gain by the patient explaining the disappearance of the mole noticed by an arrow on Fig. 8d. **g:** Lateral view of a five-years result

By performing this technique, we tried to minimize the scars with the vertical approach and we use all the glandular tissue to maximize the final volume in the central area and the upper pole.

The systematic use of a unique vertical scar can be applied to all cases with a limitation approach to some post-bariatric breasts that may lead to a small inverted T in our experience. The NAC is always isolated on a superior pedicle, keeping the glandular flaps with an inferior lateral and internal blood supply. We believe that it is more secure to keep significant infero-internal and external wide bases to the flaps and undermine only in the middle breast than harvesting the flaps on superior pedicles [21, 22] or on only perforators [15]. This vascular security allows harvesting all the glandular tissue without immediate resection and without subsequent fat necrosis.

We prefer using absorbable sutures to induce a fibrosis between the gland and the pectoralis major fascia that may remain stable with time (Fig. 8).

The release of the two fasciocutaneous flaps allows the closure of the vertical lift without invagination or tension and supports also the different sutures performed on the glandular flaps of the “chignon technique.”

We differentiate in our approach a breast lift from a mastopexy as we think that a mastopexy has to include



Fig. 9 Invagination in the inframammary fold level: result after 2 months

inevitably a glandular fixation or at least any other glandular plastic surgery procedure to deserve its name which is not always respected in the literature and in the popularized informative documents and mass media. All our patients who have benefited from a mammoplasty including a breast lift with a glandular resection, a simple breast cutaneous lift, an implant placement or an adjuvant fat grafting were not included in this study explaining why we collected 30 patients from 85 counted.

The illusion of the volume augmentation is related to the glandular distribution as nothing was added to the technique. This is a very rewarding procedure when the ptosis is due to a glandular sagging more than to a skin looseness after important weight loss, and the best candidates are women with B–D cups consulting after finishing breast feedings or never breastfed and want to correct the ptosis and recover their “former breasts.”

It is very important, then, to explain to the patient that even if the technique has a lot of advantages by avoiding using an implant and avoiding its complications (like capsular contracture, eventual rupture or a ptosis recurrence [23]), it will not replace it, but can only restore a younger shape and a better volume aspect of her own breast.

Conclusion

We propose an auto-augmentation mastopexy technique that involves glandular tissue restructured into two genuine pillars suspended in the central breast by different sutures like a “chignon hairdressing.” The best candidates are females presenting a small ptosis without important weight loss asking for their former “20-year-old breasts.” This technique achieves its limits with especially post-bariatric patients. It remains an easy, stable and rewarding technique that we advise to perform.

Compliance with Ethical Standards

Conflict of interest The author declares that he has no conflicts of interest to disclose.

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