

Labiaplasty with Stable Labia Minora Retraction—Butterfly-like Approach

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Summary: Labiaplasty, referring to a surgical labia minora reduction, is the most commonly requested genital rejuvenation by women. The purpose of this article is to show an innovative maneuver in the technique for this increasingly demanded procedure. In this strategy, labia minora are attached temporarily to the internal thigh with stitches resembling an open butterfly wing. This maneuver stabilizes the redundant labia minora soft tissue, easing the evaluation of asymmetry and aiding precision in the treatment. The study investigated 12 patients, 10 presenting bilateral hypertrophic labia minora and 2 patients with only unilateral abnormal anatomy, n = 22. The mean age was 25 years. The postoperative follow-up was uneventful. All patients presented labia minora with anatomic configuration. In 1 patient, we registered immediate bleeding that needed revision. The butterfly-like maneuver with the labia minora temporarily attached to the inner thigh can ease labiaplasty with central and inferior wedge resection. It helps diagnose asymmetry and adds precision to resect the correct amount of the hypertrophic tissue. (*Plast Reconstr Surg Glob Open* 2020;8:e2664; doi: [10.1097/GOX.0000000000002664](https://doi.org/10.1097/GOX.0000000000002664); Published online 29 April 2020.)

INTRODUCTION

The labia minora are commonly asymmetrical, with variations in appearance. In addition to the aesthetic complaint, the brushing during exercise, the discomfort with the use of the clothes, and invagination in the intercourse are causes of functional women claims.^{1–3} In patients who require frequent urinary catheterization, they benefit from labiaplasty that facilitates local hygiene.^{4,5} Women concerned about the attractiveness of the vulvar region seek vaginal rejuvenation. Stimulated by the media and internet, many of them prefer the pubic region area with minimal hair and labia minora that are not exposed or invaginated under the labia majora (Fig. 1). There are many labiaplasty approaches,^{6–11} according to different classifications and clinical presentations.^{12,13}

This article shows an innovative maneuver that facilitates the diagnosis, planning, and resection of the protruding

labia minora. They are attached temporarily in the inner thigh using 1 or more sutures in a single or running fashion.

METHOD

The study investigated 12 patients, 10 presenting bilateral hypertrophic nymphs and 2 patients with unilateral, n = 22, performed between 2012 and 2018. The mean patient age was 25 years.

Technique

The apex of the labia minora is attached to the inner thigh. Only one stitch or two stitches are enough for the wedge resection, the plastic of the labia minora or labiaplasty in “Z” or “W.” In the case of direct labia trimming, we suture the labia to the inner thigh with continuous stitches. Local anesthesia using 2% lidocaine solution with 1/800,000 vasoconstrictor promotes moderate tumescence. Metzenbaum scissors bites the labia minora to resect the hypertrophic tissue. We sutured first the muscular plane using 4-0 monocryl absorbable sutures (Ethicon, Inc., Somerville, N.J.). Then skin and mucosa planes are sutured with separate or continuous absorbable 5-0 catgut (Fig. 2). (See Video 1 [online], which describes the procedure in a 15-year-old teenager presenting bilateral abnormal labia minora associated with hanging clitoris prepuce. It clarifies the butterfly-like strategy with stable retraction

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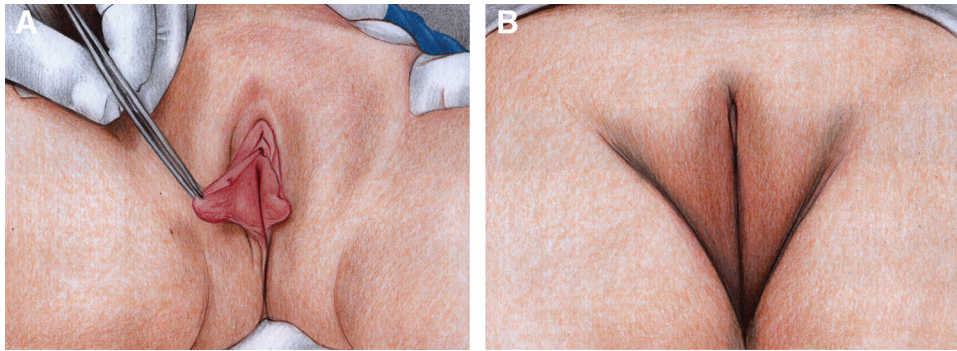


Fig. 1. Schematic drawing. (A, left) Hypertrophic and unaesthetic labia minora; (B, right) Anatomic pre-pubescent appearance of the genital area with labia minora that do not protrude beyond the labia majora, showing a short clitoral hood without extra folds.



Fig. 2. Demonstration of technique and results. (A) Transoperative view showing bilateral hypertrophic class 3 labia minora with amorphic tissue; (B) A suture stabilize the labia minora to the inner thigh configuring a butterfly open wing design. Wedge resection planned; (C) immediate aspect after correction; (D) postoperative view showing the labia minora anatomic configuration achieved after correction.

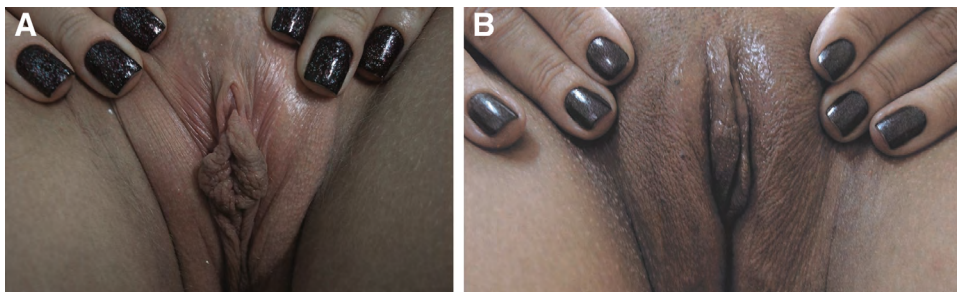


Fig. 3. Preoperative (A) and postoperative view (B) after central wedge resection labiaplasty using transoperative butterfly-like labia minora stable suspension to correct class 3 hypertrophic labia minora.

of the labia minora.) Then, the postoperative care is made with ice packs for 2 days and local antiseptic (Andolba spray) for 2 weeks. The patient observes sexual abstinence for 6 weeks.

RESULT

Labia minora class 2 and 3 were prevalent. There was no difference in long-term cicatrization comparing different ages. The patients referred to temporary induration along the longitudinal mucosa scar that remained a few days after central wedge or inferior resection. In all patients, there was the improvement of the labia minora anatomy and symmetry (Fig. 3). The postoperative follow-up was uneventful. The exception was 1 patient who presented postoperative bleeding that required revision. There was no registered labia minora over resection or later revision in the study.

DISCUSSION

This study demonstrates technical detail possible to indicate in conjunction with several approaches in the treatment of hypertrophy and/or asymmetry of the labia minora. In current labiaplasty techniques, Gillies hook or Allis forceps stabilizes the soft tissue of the labia minora to help the resection. The butterfly-like maneuver contributes to evaluate asymmetry and to plan the resection with precision. (See Video 2 [online], which displays the dynamic of the stable bilateral retraction of the labia minora suturing to the inner thigh with more than two stitches. Then, the tissue resected and the preserved one remain temporarily attached to the inner thigh.) Motakef et al¹⁴ in a recent review in the literature of 247 articles, involving 1949 patients, registered that 7 techniques stand out: de-epithelialization, direct excision, W-plasty, Z-plasty, wedge excision, laser excision, and composite excision. As pointed out by Ellsworth et al,¹⁵ direct labia minora trimming is a simple technique. But it removes the natural contour, coloration, and texture of the free edge of this structure. This technique amputates the naturally darker corrugated shape and may lead to visible scar and affect sensation. Deepithelialization preserves the natural border of the labia minora and its neurovascular supply. But, it may be poorly suited for patients with a broader labial width.

Wedge resection retains the natural anatomy of the free edge of the labia minora; however, it may create an abrupt contrast in the coloration of the labia minora where tissues are sutured.

In our investigation, we indicated the butterfly-like approach preferentially in the central and inferior wedge resection. We agree with Hamori³ that besides labia minora length, we have to consider factors as color, texture, and labial shape to find the better technique. As she mentioned, deepithelialization and W-plasty are technically challenging and time-consuming without offering superior results.

The butterfly-like stable suspension of the amorphous labia minora can be associated with most current labiaplasty techniques. It adds precision even in elaborate approaches as the star resection of the protruding labia minora.¹⁶

The stabilization of the labia minora with a metal rod is indicated in the direct excision¹⁷ but is limited in methods with central or inferior wedge resection and its variants.¹⁸ In our investigation, we indicated the butterfly-like labia minora strategy only in the central and inferior wedge resection.¹⁹

According to our data, we registered only 1 case presenting postoperative bleeding that required revision. Literature revision shows complication rates around 2%, the delay in healing being the primary outcome.²⁰ However, unsatisfactory scarring, superficial infections, over resection, and eventually, flap necrosis are possible unfavorable events.²¹

Composite labiaplasty—the correction of labia minora and protuberant clitoral protrusion and hooding in the same session—and the wedge resection, if compared with direct excision, present a high rate of complications. As demonstrated in Motakef et al's review,¹⁴ the complication and reoperation rate for composite labiaplasty was at 17.4%, W-shaped resection in 25 patients (16% complication rate), and Z-plasty in 15 patients (13% complication rate). In general, most complications are minor, but severe outcomes can occur with considerable consequences.²²

To prevent complications, it is advisable to avoid labiaplasty of both the labia minora and labia majora in 1 session. The patient is often satisfied with labia minora reduction alone. If indicated, labia majora should be corrected 6 months later.

Table 1. Patient, Age, Technique, Classification, Follow-up, and Complication

| Patients | Age | Technique | Class | Follow-up | Complication |
|----------|-----|----------------|-------|------------|--------------|
| 1 | 20 | Central wedge | 2 | Uneventful | — |
| 2 | 39 | Central wedge | 2 | Uneventful | — |
| 3 | 21 | Inferior wedge | 1 | Uneventful | — |
| 4 | 19 | Central wedge | 2 | Uneventful | — |
| 5 | 32 | Central wedge | 3 | Uneventful | — |
| 6 | 22 | Central wedge | 3 | Uneventful | — |
| 7 | 26 | Central wedge | 2 | Uneventful | — |
| 8 | 35 | Inferior wedge | 3 | Uneventful | — |
| 9 | 16 | Central wedge | 2 | Uneventful | — |
| 10 | 21 | Central wedge | 3 | Uneventful | — |
| 11 | 16 | Central wedge | 3 | Bleeding | — |
| 12 | 38 | Central wedge | 2 | Uneventful | — |

12 patients; n = 22; mean age = 25 y.

Contraindications also include patients with body dysmorphic syndrome and those who expected that the procedure would enhance their sexual lives and improve the ability to achieve orgasm.²³

Then, the stable retraction of the protruding labia suturing it to the inner thigh eases diagnosis asymmetry, contributing to precise planning and resection. It is an innovative way to stabilize labia minora soft tissue and is useful in different labiaplasty approaches.

CONCLUSIONS

The labiaplasty with stable fixation of the labia minor at the inner thigh, butterfly-like maneuver, contributes to plan and execute labiaplasty with central and inferior wedge resection. It helps to evaluate labia minora asymmetry and adds precision to resect the correct amount of the labial protrusion. (Table 1)

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