

V wedge De-Epithelialization Technique for Labial Reduction; More Effective, Less Complications

Abstract

Introduction: Enlarged labium minus can be annoying for functional, aesthetic or social reasons. In the past, labia reduction was performed by amputation of the protuberant segment and over sewing the edge. However, this technique removes the natural shape and color of the edge of the labium minus. The V wedge De-Epithelialization was presented in year 2000 with better aesthetic results and less side effects. This study was aimed to investigate the side effects and results of the V wedge de-epithelialization technique with unique cultural and social characteristics of our context.

Method: This quasi-experimental study was conducted on 40 married female candidates for labial reduction between July to March 2022. These participants were chosen by convenience sampling method. This group of females treated by V wedge de-epithelialization technique and followed up one month after the surgery. Side effects scale, female sexual function (FSFI) and genital appearance satisfaction (GAS) scales were employed for data collection in this research. Data were analyzed using SPSS v.22 software.

Results: More than two third of samples were between 35 to 40 years of old and 68 % were employed. About 24 % had an academic education degree and most of participants had a diploma degree. Wound dehiscence was seen in less than 10 % samples after one month a follow up. The new method showed a significant FSFI improvement scores compared with pre operation scores ($p < 0.05$). Statistical significant differences was seen in GAS scores before and after the operation and one month's follow up too.

Research Article

Bahareh Arbabi*

Department of Obstetrics and Gynecology, Milad hospital, Isfahan, Iran

***Correspondence:** Bahareh Arbabi, Department of Obstetrics and Gynecology, Milad Hospital, Isfahan, Iran; Email: bahareharbabi77@gmail.com

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Conclusion: In terms of aesthetic aspect, the V wedge de-epithelialization technique for labial reduction has better results in sexual function and general appearance satisfaction with fewer side effects and risk compared with older lobectomy techniques.

Keywords

Labial reduction • Satisfaction • Side effects • V Wedge De- Epithelialization

Introduction

Female genital rejuvenation (labiaplasty) has been increasingly requested in recent years because of functional, aesthetic or social reasons [1]. These reasons can be categorized into physical and psychological aspects. Physical discomfort includes intercourse interruption, chronic irritation and chafing while wearing tight pants or just walking. Psychological problems are

decreased self-esteem, anxiety and fear or shame of coitus; therefore, labia minor reduction has been the most practiced esthetic procedure for the female genitalia. Gynecological plastic surgeons have proposed several methods for labia reduction, but there is no consensus on which one is the best choice [2,3]. Edge resection is a simple and common labiaplasty method that is widely used for patients who require dark edge removal [4], but a long scar may occur along the edge with this technique. For most bulge labia minor cases, Altars' central wedge resection method can resolve most of the extra tissue, but this also may leave an obvious scar as well as sharp color changes [5]. Giraldo improved the central wedge resection method with 90-degree Z-plasty to reduce the obvious scarring [6], but a sharp zone of color change was still seen in the postoperative picture. Choi designed a method of reducing the labia minor by means of de-epithelialization of the central part of each surface to preserve the natural contour and neurovascular supply to the edge [7], but it failed to shorten the length of the free border [3]. Rouzier resected the 90-degree wedge area of the lower part of the labia minora and transferred the front flap to the lower part so that the incision was relatively hidden [8]. However, this surgery method may damage the main blood vessel in the center of the labia minora. Cao combined wedge and edge resection in labiaplasty for severely hypertrophied labia minora and presented satisfactory results, but there is still a low risk of incision dehiscence at the cross-point of the two suture lines [3]. The surgical methods introduced previously, including wedge and edge resection, may cause some side effects such wound dehiscence, obvious scars or chronic discomfort and need revision. To reduce complications and obtain better clinical results, we nominate a new modified labiaplasty method called **V wedge De-Epithelialization** for labial reduction with more patients' satisfaction, cosmic advantages and less side effects.

Method

40 married female patients between the ages of 20 to 45 years old, who applied to cosmic clinic between July to March 2022 were included in this clinical trial. Women who have known endocrine, metabolic or dermatological disorders, vitamin Deficiency and smokers were not included. Written consent form was obtained from all participants before intervention. Patients who did not

attend follow up and prescriptions regularly were excluded from the study. Ethical approval was obtained from the local ethics committee. These labiaplasty candidates treated by V wedge de-epithelialization surgery technique and followed up one month after the surgery. Side effects scale was employed to evaluate the surgery side effects after the surgery. Bleeding, scar, exudative secretions and wound dehiscence were evaluated by the side effects check list scale one and 30 days after the surgery. Female sexual function (FSFI) score was employed to evaluate samples sexual satisfaction 30 days after the labiaplasti. It is a 19 item 5-points rating scale questionnaire; total scores range from 19 to 95 and higher scores indicates better level of sexual function [9]. Genital appearance satisfaction (GAS) scale was used to collect data for samples satisfaction in genital appearance domain 30 days after the surgery. This scale contains 11 statements about attitudes toward genital appearance. Each item is scored between 0 and 3 and total scores range from 0 to 33. Higher scores represent greater dissatisfaction with the genitalia [10]. Data were analyzed by spss v.22 software.

Findings

Data analyzing showed that 31 patients (%77.5) were between 35 to 40 years of old and 68 % were employed with more than 500 dollars income monthly. %24 had academic education and most of patients (%64) had diploma degree, the others were uneducated. Wound dehiscence was seen in less than %10 of samples after one month follow up. There was no any post-surgery bleeding in v-wedge labiaplasti 30 days follow up. Less than %20 of patients reported exudative secretions. Post operation scar was seen in less than %10 of v-wedge labiaplasti patients. We used FSFI questionnaire to evaluate labia plasti patients' satisfaction with the result of operation in sexual function field. Findings revealed that %60 of post labia plasti patients reported very satisfied, %25 satisfied, %10 little satisfied and %5 not satisfied with the sexual function outcomes one months after the surgery. Post operation scores analysis showed meaningfully improvement in patients post operation sexual function satisfaction. Genital appearance satisfaction scale (GAS) was employed to score the post operation patients genital outcome satisfaction one months after the surgery; 11 statements self-report attitudes and viewpoints about her sexual appearance and attraction. This questionnaire scores between 0 to 33, higher scores

means greater personal dissatisfaction about genital appearance. Findings analysis revealed that %75 of females were highly satisfied, %20 showed moderate satisfaction and others were relatively satisfied with the surgery visual result. There was no any unsatisfied patient in this part of labiaplasti outcome.

Discussion

Labiaplasti has become a popular and attractive cosmetic procedure in recent years [11]. Several methods of reductional labiaplasty surgeries have been introduced until now. These labiaplasti methods main complications include wound dehiscence, obvious scars or chronic discomfort and the need for revision [12]. In this article we presented V-Wedge De-Epithelialization technique for labial reduction; more effective, less complications. In this method there was no any post operation bleeding and less than %10 scar was seen. In W-shape resection, Wedge resection and laser bleeding and hematoma prevalence rate was 4 to 10 percent [8,13,14]. In our method dehiscence rate was zero but in direct excision the rate of dehiscence was about %25 to %36; that seems meaningfully very higher in rate [15,16]. Poor aesthetic results, discoloration, discomfort and dissatisfaction are common side effects in wedge resection and direct excision but in our method discomfort rate was zero and just %5 patients were not satisfied with the sexual function one month follow up. In our labiaplasti method there was more than %95 genital appearance satisfaction but there was about %75 satisfaction in direct excision method.

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Satisfaction rate in W-shaped resection seems similar to our labiaplasti method (90 to 100 percent) [17,18]. In V-Wedge labiaplasti method reoperation was not seen but reoperation rate was %2 to %7 in composite reduction method [19].

Conclusion

From whole viewpoint and with considering main aspects of V-Wedge De-Epithelialization technique for labial reduction such as side effects like bleeding, dehiscence, re operation and scars, patients' genital appearance satisfaction and post operation sexual function, we can present this method as a safe and more effective method in results and less complications. In this method there is no dehiscence and low rate of bleeding and discomfort or dissatisfaction were seen. This method has no damage for main blood vessels and has no noticeable scars. In other word we can claim that we would aggregate other methods benefits in this labiaplasti method with less complications and more clients' satisfaction and sexual functioning.

As genital cosmetic issues are being more attractive in recent years and more females are seeking these type of cosmetic procedures, cosmetic surgeons have to adapt with these changes in females cosmetic modes. In this way cosmetic procedures must be improved to the more effective and with less complications cosmetic methods. V-Wedge De-Epithelialization technique is a new method to achieve this goal because of better cosmetic advantages and satisfaction of cosmetic clients with less unwanted consequences.

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