

Increase Lobuloplasty in the Treatment of Deformities Secondary to the Use of Stretched Piercing Earlobe

Abbud T¹, Pontes L¹, Abbud M² and Jardini Barbosa MV^{3*}

¹Student of the School of Medicine - University of Franca – UNIFRAN, Brazil

²Board Certified Plastic Surgeon – Brazilian Society of Plastic Surgeons, Brazil

³Board Certified Plastic Surgeon, Coordinator of the Morphofunctional and Integrated Practices Laboratories - University of Franca – UNIFRAN, Brazil

*Corresponding author:

Marcus Vinícius Jardini Barbosa,

Alameda dos Flamboyants,

700–Morada do Verde

Zip code: 14404-409,

Franca–SP, Brazil.

Tel: +55 16 99181 7833 (mobile); +55 16 3701 4109,

E-mail: drmbarbosa@gmail.com.br

Received: 02 Nov 2020

Accepted: 18 Nov 2020

Published: 23 Nov 2020

Copyright:

©2020 Jardini Barbosa MV et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and build upon your work non-commercially.

Citation:

Jardini Barbosa MV, Increase Lobuloplasty in the Treatment of Deformities Secondary to the Use of Stretched Piercing Earlobe. Clinics of Surgery. 2020; 4(1): 1-4.

Keywords:

Ear; Acquired ear deformities; Body piercing; Plastic surgery

1. Abstract

1.1. Background: The use of stretched earlobe piercings promotes progressive dilation of the earlobe and the treatment of this deformity can be challenging. There are several techniques to treat these deformities and considering that the dynamic of enlargement promotes an atrophy and thinning of all the components of the earlobe, the main challenge of these techniques is to give back the characteristic volume of this structure.

1.2. Objective: The purpose of the present study was to present an alternative technique for earlobe reconstruction in patients who present deformities due to stretched earlobe.

1.3. Methods: The internal margin of the defect is marked in a triangular shape with upper vertex (point “a”), anterior (point “b”) and posterior (point “c”). A flap to be de-epithelialized is performed by marking a small line from point “b” (b) and another point from the upper third of the distance “a-c”. An incision was made in the line b-b', to create an anterior and a posterior flap. The posterior flap was de-epithelialized and its distal end was sutured to the point “a”. The anterior flap was overlapped on the posterior flap and the cutaneous margins of the flaps were sutured.

1.4. Results: The technique was applied in five patients (n = 5) who

present deformities secondary to the use of stretch earlobe piercing. There were no immediate or late complications in an average follow-up period of 12 months.

1.5. Conclusion: The postoperative results showed a very natural aspect of the earlobe and should be considered as an alternative for earlobe reconstruction.

2. Introduction

Facial aesthetics are established by the harmonic set of the anatomical structures including the ears. The earlobes are characterized by their mobility with no rigid structures [1], and their volume are composed by the subcutaneous adipose tissue [2]. Earlobes are the one of the main places for using aesthetic accessories or adornments; however, because of their relative fragility, the continuous use of heavy or wide objects can promote a progressive weakness and deformities of the local anatomy [3]. In the recent decades, people started to use single or multiple heavy earrings, resulting in greater local tension, which can lead to spontaneous or accidental lacerations [4]. In these cases, lobuloplasty is indicated and the results are quite satisfactory [5, 6]. The use of stretched earlobe piercings, promotes progressive enlargement of the earlobe and the treatment of this deformity can be challenging [3, 7].

Auricular surgical interventions due to problems related to piercings are more common among people between 19 to 34 years old [2], however, currently there has been an increased incidence of these procedures in people under 18 years old [4]. According to the American Society of Plastic Surgeons (ASPS), this kind of procedure is the sixth most common in men and the tenth in women [1]. There are several techniques to treat these deformities and the choice will depend on the type and size of the defect, as well as the surgeon's experience [7, 8]. The most used techniques are based on simple resection and suture of the incomplete cleft or a wedge resection when the cleft is larger, or when if there is a complete cleft [1]. However, in cases where there is an excessive enlargement with or without rupture, the use of local flaps may be necessary. In these cases, the most used flaps are: z-plasty, L-plasty or cutaneous flaps from the retroauricular region [6, 8, 9]. Considering that the dynamic of enlargement promotes an atrophy and thinning of all the components of the earlobe, the main challenge of these techniques is to give back the characteristic volume of this structure [2, 3]. Therefore, the purpose of the present study was to present an alternative technique for earlobe reconstruction in patients who present deformities due to stretched earlobe, in order to restore the anatomy and aesthetics of this structure.

3. Idea

3.1. Preoperative Marking

With the patient seated, the entire internal margin of the defect to be excised is marked in a triangular shape, creating three points: Point "a" - at the upper extremity, point "b" - at the anterior-lower extremity, and point "c" - at the posterior-lower extremity (Figure 1).

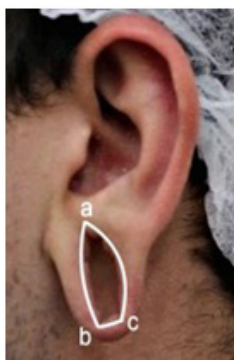


Figure 1 – Preoperative marking of the medial margin of the lesion - delimitation of the points "a", "b" and "c".

The flap to be de-epithelialized was designed in the posterior aspect and performed by marking a small line from point "b" (parallel to the mandible branch), determining the point "b'", and another point from the upper third of the distance "a-c" (parallel to the mandible body), called point "a-c / 3" (Figure 2A and 2B).



Figure 2A – Preoperative marking of the points of the area to be de-epithelialized in the posterior aspect of the earlobe defect.

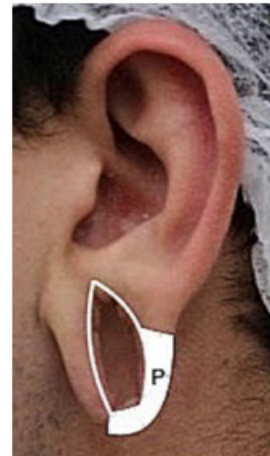


Figure 2B – Posterior area "P" to be de-epithelialized and sutured to the point "a", for later coverage by the anterior flap.

3.2. Operative Technique

With the patient in supine position, antisepsis with alcoholic chlorhexidine was performed and a local infiltrative anesthesia was done in the entire earlobe with 2% lidocaine solution with adrenaline 1:400.000. An incision was made with a scalpel in the total thickness of the internal margin (medial edge) of the defect (points "a", "b" and "c"). Then, an incision was made in the line b-b', to create two flaps: an anterior flap and a posterior one (called "P" flap). The posterior flap was completely de-epithelialized, and, after revision of hemostasis, the distal end of the "P" flap was sutured to the point "a" with a 5-0 monofilament nylon (Figures 3A and 3B).

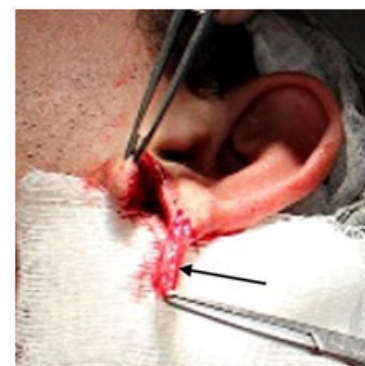


Figure 3A – Delimitation of the anterior skin flap and posterior dermal-fat flap ("P" flap - arrow).



Figure 3B – Positioning and suture of the posterior flap (“P” flap) to the point “a”.

After the suture of the posterior dermal-fat flap at the point “a”, the anterior flap was overlapped on the posterior, in order to give volume of the reconstructed lobe. Then, the cutaneous margins of the flaps were sutured with 6-0 monofilament nylon stitches (Figure 4).



Figure 4 - Final aspect of the immediate postoperative period of the left ear lobe.

4. Clinical Application

The described technique was applied in five male patients (n=5) who present deformities secondary to the use of stretch earlobe piercing, bilaterally according to the parameters described above. Then, a total of 10 earlobes were treated. The age ranged from 18 to 25 years-old (average age 21,4 years-old). The average diameter of the defect was 2.5 cm, bilaterally. The stitches were removed, alternately, between the fourth and eighth postoperative day. There were no immediate or late complications in an average follow-up period of 12 months. The late postoperative result is shown in (Figures 5A and 5B).



Figure 5A - Preoperative aspect of the enlarged right earlobe due to the use of a stretched piercing (oblique view).

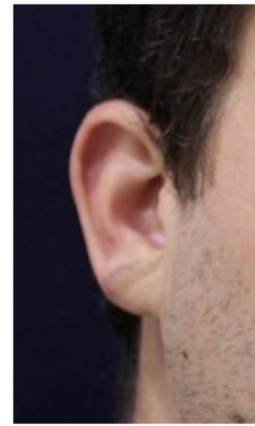


Figure 5B - 12-month postoperative aspect of the right lobuloplasty (oblique view).

5. Discussion

Earlobe clefts almost occurs due through trauma, including babies pulling earrings, take off a cloth, heavy earrings, etc., [1, 3]. In the most recent decades, the use of piercings, stretch piercing earlobes, and mutilation have been become a common behavior in some social segments [3, 4].

Many techniques have been described to treat or repair these deformities and they can be divided into those involving direct suture and those using local flaps with and without preservation of the earring hole [6, 9]. However, the treatment of defects due to a long last earlobe stretched is still a challenge for plastic surgeons [2, 3]. Chiummarielo et al. (2011) described two techniques for split earlobe repair. Despite de good results, none of their 30 patients presented a big cleft of the earlobe like the present sample [9]. Niamtu (2002) described eleven pearls for cosmetic earlobe repair. He highlighted that the precision cutting of the mobile earlobe is best performed with a pressureless incisional modality and when repairing a full-thickness earlobe tear it is important to use one or two resorbable deep sutures [2]. In the present study a non-absorbable suture was used to reduce the tension of the upper fixation of the dermo-fat flap.

In fact, the best approach in earlobe reconstruction is leaving the deep tissue intact as support [5]. In this way, the present technique allows to fill the earlobe with the patient's own fat, through the maintenance of the dermo-fat flap, making a more natural outcome aesthetically aspect.

The most frequent complications of the procedure include infections, bleeding, dehiscences, necrosis and scar abnormalities such as keloid or hypertrophic scar [6, 10]. In the present study, none of the patients presented early or late complications. The same low rate complications were found by Pereira et al. (2011) [3].

Although, in some cases the described technique requires a longer surgical time when compared than others, the postoperative results showed a very natural aspect of the earlobe and should be considered as an alternative for earlobe reconstruction.

References

1. Altıntaş A, Çelik M, Yeğın Y, Kayabaşođlu G. Auricular Lobuloplasty. *Turk Arch Otorhinolaryngol.* 2017; 55(4): 172-6.
2. Niamtu J. Eleven pearls for cosmetic earlobe repair. *Dermatol Surg.* 2002; 28: 180-5.
3. Pereira AA, Tien SLK, Silva GB, Bessa CMC, Awad M. Reconstruão de lbulo aps alargador de orelha. *Rev Soc Bras Cir Plast.* 2011; 26(supl): 38.
4. Fung N, Ishii M, Huynh P, Juarez M, Bater K, Darrach H, Papel ID, Kontis T, Nellis JC, Ishii L. Stretched earlobe piercings negatively impact casual observer perceptions. *Facial Plast Surg.* 2019; 35: 299-305.
5. Abenavoli FM. Split earlobe: repair using a half z-plasty technique. *Plast Reconstr Surg.* 1996; 98(2): 372-3.
6. Staiano JJ, Niranjana NS. Split earlobe repair using a double-flap technique. *Ann Plast Surg.* 2001; 47(1): 89-91.
7. Vathulia M, Jain V, Jain P. Simple tips for ear lobule reconstruction-“Lobuloplasty Revisited”. *Indian J Otolaryngol Head Neck Surg.* 2019; 71(2): S1096-8.
8. Sharma R, Krishnan S, Kumar S, Verma M. Rotation flap lobuloplasty: technique and experience with 24 partially torn earlobes. *Int J Oral Maxillofac Surg.* 2014; 43: 1206-10.
9. Chiummariello S, Iera M, Areleo S, Alfano C. L-specular plasty versus double-round plasty: two new techniques for earlobe split repair. *Aesth Plast Surg.* 2011; 35: 398–401.
10. Kumaraswamy M, Waiker VP. Torsion of partial cleft of ear lobule. *J Tissue Viability.* 2014; 23: 34-6.