Improving the results of upper eyelid blepharoplasty: zetaplasty to correct lateral eyebrow sliding

Melhorando os resultados da blefaroplastia superior: zetaplastia para correção de queda do supercípio lateral

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ABSTRACT

Introduction: A frequent aesthetic problem that occurs in the aging process is the drooping of the eyebrows, more common and evident in the mid lateral aspect. Methods: In order to obtain a satisfactory cosmetic result associated with minimal scar extension, we present a less invasive technique, indicated for select patients who present with dermatochalasis and lateral eyebrow sliding. Results: This technique showed to be an easy procedure to execute and resulted in satisfactory aesthetic outcomes, similar to the technique described by Castañares, with the advantage of scar limited to the lateral region. Conclusions: As another option for the surgical elevation of the eyebrow lateral third segment, an easy Z-type skin flap transposition is a cost-effective procedure that can offer less evident scars with a natural aesthetic effect in this exposed area of the face.

Keywords: Blepharoplasty; Plastic surgery; Surgical flaps.

RESUMO

Introdução: Um problema estético frequentemente observado no processo de envelhecimento facial é a queda dos supercílios, principalmente na sua porção lateral. Métodos: A fim de obter resultados estéticos satisfatórios e cicatriz menos extensa, apresentamos uma técnica menos invasiva para elevação do supercípio lateral. Esta técnica é indicada para casos selecionados de pacientes com dermatocálaze associada à queda da porção lateral do supercípio. Resultados: A técnica mostrou-se de fácil execução, proporcionando resultados estéticos gratificantes, similares aos da técnica descrita por Castañares, com a vantagem de resultar em cicatrizes limitadas à região lateral do supercípio. Conclusões. A zetaplastia com transposição de retalhos cutâneos no terço lateral dos supercílios mostrou-se uma boa opção para a elevação desta área. Além de ser pouco invasiva, esta técnica apresenta como vantagens cicatriz pouco evidente, menor custo e proporciona um efeito estético natural nesta importante região da face.

Descritores: Blefaroplastia; Cirurgia plástica, Retalhos cirúrgicos.

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INTRODUCTION

Many patients seeking rejuvenation through upper blepharoplasty are concerned only with the upper eyelid, without a conscious recognition of the role played by the lateral brow descent. In these cases, the patient usually assumes that his/her appearance is easily correctable by a standard upper blepharoplasty only. Achieving a satisfactory aesthetic result begins, therefore, with a careful preoperative examination of the patient’s anatomy and assessment of the patient’s desires, which must be balanced with conservation of ocular protective mechanisms, in order to avoid disappointment in the surgical results1-3.

Several surgical techniques have been used to manage brow ptosis. Conventional approaches are typically associated with more aggressive procedures, such as direct-approach skin resections at the hairline and scalp, as well as endoscopic, temporal and coronal lifts5-8. However, patients expecting improvement with a standard upper blepharoplasty typically reject these procedures.

OBJECTIVE

This article describes a less invasive and cost-effective procedure to obtain a satisfactory aesthetic outcome in selected patients. Zetaplasty was performed on the eyebrow to improve the upper blepharoplasty results in cases of lateral brow sliding associated with dermatochalasis (Figures 1A, 1B, 1C).

RESULTS

The zetaplasty approach in conjunction with the upper eyelid blepharoplasty showed very satisfactory aesthetic outcomes, leading to an adequate lateral eyebrow position and minimal scarring after surgery (Figures 1B, 2 and 3). No postoperative complaints or complications have so far been reported after this technique.

DISCUSSION

The ideal eyebrow design has changed over time. Art historian Johann Winckelmann (1717-1768) stated that the perfect eyebrow formed a delicate arch just over the brow bone9. In 1975, the ideal brow was described as having its highest point located above the lateral limbus10. More recently9, it was observed that the general public preferred the apex of the brow to be located in a more lateral position than the lateral limbus (Figure 4).
typically reject more aggressive brow lift approaches. In such upper blepharoplasty candidates, the zetaplasy approach to correct lateral eyebrow sliding is an option to be considered.

Although direct brow lifts, such as the technique described by Castañares\(^6\) and transpalpebral browpexy approaches, are less aggressive procedures to elevate the brow position, conspicuous scarring may occur following a direct approach, and less lift than desired may be associated with transpalpebral approaches\(^1,2,12\). The zetaplasy approach in conjunction with the upper eyelid blepharoplasty proved to be a rapid procedure that can be easily performed in selected patients, with a satisfactory aesthetic outcome. A major concern for most surgeons who have not performed this approach may be the zetaplasy scar. However, when performed in Caucasian patients, who usually present thinner skin, the scar becomes almost imperceptible six months postoperatively. As noted by other authors who performed other techniques in the brow region, scars heal very well and make-up can be used to help attenuate them in this region\(^13-17\). Other advantages of this technique include a shorter learning curve and cost-effectiveness of the procedure when compared with more aggressive brow-lift approaches.

There is a limited number of patients in whom this procedure can be performed: patients with Fitzpatrick skin types I, II and III, preferably women (because of the use of make-up while the scar is still apparent), who present with dermatochalasis of the upper lids with significant lateral brow sliding and who do not desire a complex procedure to elevate the lateral portion of the brow. Patients who need elevation of the entire brow complex, patients with darker skin types, or patients who cannot tolerate even minimal scarring are not the best candidates for this approach.

Explaining the potential favorable and less favorable outcomes is mandatory for meeting patients’ expectations. Selected patients who are reluctant to proceed with more aggressive brow-lifting procedures and those who underwent a single blepharoplasty procedure and are unhappy with the lateral hooding are potential candidates for the zetaplasy approach to elevate the lateral brow.

**CONCLUSION**

The zetaplasy approach in conjunction with upper eyelid blepharoplasty showed satisfactory aesthetic outcomes, leading to an adequate lateral eyebrow position and minimal scarring after surgery. No postoperative complaints or complications have been reported so far with this technique.
COLLABORATIONS

THO Analysis and/or interpretation of data; final approval of the manuscript; conception and design of the study; writing the manuscript or critical review of its contents.

CAAF Analysis and/or interpretation of data; final approval of the manuscript; conception and design of the study; completion of surgeries and/or experiments; writing the manuscript or critical review of its contents.

MHO Analysis and/or interpretation of data; final approval of the manuscript; conception and design of the study; writing the manuscript or critical review of its contents.

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REFERENCES


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