New techniques

Blepharoplasty with correction of senile entropion in the lower eyelid

Blefaroplastia com correção de entrópio senil da pálpebra inferior

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ABSTRACT

This study describes a technique for correcting entropion based on the case of a female patient who had that alteration in the left lower eyelid, in addition to sagging and fat pseudo-herniation in the left and right eyelid areas. Bilateral upper and lower blepharo-plasty was performed, with wedge resection of the orbicularis muscle and tarsus in both lower eyelids, followed by reconstruction. The patient presented good functional and aesthetic results, with no complications.

Keywords: blepharoplasty; entropion; reconstruction.

RESUMO

Descreve-se a técnica para correção do entrópio, relatando-se o caso de paciente que apresentava essa alteração na pálpebra inferior esquerda, além de flacidez e pseudo-herniações de gordura nas regiões palpebrais direita e esquerda. Foram realizadas blefaroplastia superior e inferior bilaterais, e ressecção total em cunha do músculo orbicular e do tarso de ambas as pálpebras inferiores, seguida de reconstrução. A paciente evoluiu com bom resultado funcional e estético, livre de complicações. **Palavras-chave:** blefaroplastia; entrópio; reconstrução.

INTRODUCTION

Entropion is a senile disorder in which the eyelid turns in toward the eyeball, which can cause irritation, tearing, hyperemia and even corneal ulcers and scarring.¹

It is associated with horizontal eyelid laxity, which is caused by the weakening and laxity of the orbicularis muscle, tarsus and chantal ligaments, or by the detachment of the capsulopalpebral fascia.¹⁻³

CASE REPORT

A seventy-six-year-old female patient with sagging and excess skin in the upper and lower eyelid regions. She also presented inversion of eyelashes towards the eyeball (entropion) in the left lower eyelid, causing hyperemia, irritation and great local discomfort (Figure 1).

METHODS

Following local anesthesia, the excision of the lower eyelids's skin was performed along the ciliary margin, with the visualization of the orbicularis muscle. For the correction of the entropion, the wedge excisionwas carried out with an iris scissors, encompassing the orbicularis muscle and tarsus, exposing the eyeball. After hemostasis, the repositioning and reconstruction of the palpebral border was carried out withsimple suture of the muscle and tarsal borders in multiple levels, using 6.0 Vicryl absorbable sutures (Figure 2). The last stage of the surgery consists of the excision of the lower eyelids' excess skin and the suture with 6.0 nylon thread. The patient also underwent upper blepharoplasty during the procedure.





Figure 1- A and B: Patient with bilateral blefarochalasis and entropion in the lower left eyelid. Note the inversion of the eyelashes.

RESULTS

The suture was removed after seven days with absence of complications in the post-operative period. There was a good aesthetic result two months after the surgery, with the maintainance of the correct eyelid position and absence of irritative symptoms in the eyeball (Figure 3). Follow up visits are carried out every six months.



Figure 2 - A: Wedge resection of the orbicularis muscle and tarsal cartilage.
B - Wedge removal of the tarsus. C - Reconstruction of the edges of the orbicularis muscle and tarsus.





Figure 3 - A and B: Sixty-day post-operative with full resolution of entropion and improvement of complaints.

DISCUSSION

Senile entropion occurs in individuals older than 60, being more frequent in women, possibly due to the relatively smaller size of the tarsal plate in women. The lower eyelids are most affected, usually with complete involvement of the eyelid margin.³

Surgery is the only effective and definitive treatment.² Thorough knowledge of eyelid anatomy is essential to determine the etiology and carry out the surgical intervention of the lower eyelid abnormalities.

The eyelid is divided into an anterior and a posterior lamella. The anterior lamella consists of skin and orbicularis muscle. The posterior lamella consists of the rectractor eyelid system, tarsusand conjunctiva. The first is the fascia that splits to encapsulate the inferior oblique muscle and then re-joins to form the dense fibrous sheet (fascia capsulopalpebral),⁴ which inserts in the lower edge of the tarsal plate. The failure of this fascia to insert in the lower eyelid's tarsus commonly causes instability in the rotation movement and entropion.⁵

The tarsal plates are composed of dense connective tissue. The lower eyelid's tarsus is 4-5mm high 16-20mm long and 1mm thick. They are anchored medially and laterally to the orbital rim by cathal tendons. The posterior surface is covered by densely adherent conjunctiva.⁵

Senile entropion is caused mainly from muscle and tarsal laxity and sagging, causing the edge of the eyelid to lose its correct positioning. Performing the resection of the lower eyelid's muscle band causes the horizontal shortening of the orbicularis muscle and tarsus, lending them more firmness and allowing their return to the correct position.²

The most common complications in the post-operative period are hematomas and, less frequently, ectropion, dehiscence and recurrence of entropion, with the possibility of further surgery.²

CONCLUSION

Based on the main causes of the condition, the procedure was demonstrated to be a simple, safe and effective option, yielding good functional and aesthetic result for the treatment of the senile entropion. \bullet

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