



CO₂ Laser Blepharoplasty

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Introduction

The cosmetic surgery of the eyelids is performed in adults of all ages, some patients are operated on to correct problems of aging at an early age such as 20 or 30 years in both sexes. Blepharoplasty is the surgery that seeks to rejuvenate the eyelids by remodeling the periocular tissues. It is performed mainly for aesthetic reasons, but in some cases only for visual reasons (functional blepharoplasty) since the skin drop of the upper eyelids can cause a reduction of the visual field. The aging process causes several changes in the periocular area. In the upper eyelid are characterized by an excess and fall of the skin of the eyelid, which causes an aesthetic alteration but in some cases also causes an alteration of the visual field of the patient and ocular fatigue due to the weight that the excess of skin represents for eyelid. This is a condition called dermatochalasia. Another condition associated with aging is the presence of a palpebral ptosis caused by laxity of the fibers of the levator palpebrae superior muscle. In the lower eyelid, the laxity of the fibro tendinous structures that appear with age causes two fundamental changes at the eyelid level. On the one hand, the orbital fat, which occupies a large part of the orbit, is herniated forward, becoming visible on the skin and giving rise to the known "bags". Secondly, the stretching and flaccidity of the skin, orbicular muscle and tendons of the eyelids give rise to wrinkles, folds and a lower eyelid descent. Likewise, palpebral positions such as ectropion, which in turn would produce an alteration in the drainage of the tear, can also occur in association with aging.

Material and Method

The upper and lower blepharoplasty procedure was performed 20 years ago with a CO₂ laser cut, either with the titanium tip or with the diamond blade and the CO₂ laser [1]. Blepharoplasty of the upper eyelid consists of the removal of excess skin and in some cases of a part of the underlying orbicularis muscle. Some cases

also require eliminating part of the internal fat package, but always conservatively. For this surgery, we make incisions with the CO₂ laser in the natural folds of the eyelid, which avoid the visibility of the scars. The technique allows us to remove excess skin, fat [2] and sometimes muscle without bleeding making the procedure faster and without residual bruises for the patient. In lower blepharoplasty we must distinguish between the treatment of the bags and the treatment of laxity and wrinkles of the skin. We treat the fat bags of the eyelids by reducing them [3,4]. The reduction of fat packs is done in patients who have medium or large bags. In the rest of patients, it may be preferable to reposition them, using the patient's own fat to erase the grooves that exist under the bags. In both cases, the handling of the bags can be done externally, making an incision in the skin with the CO₂ laser, or internally through the conjunctiva (transconjunctival approach) [5]. The advantages of the latter are many, including the absence of a visible scar, faster recovery and greater safety since there is more direct access to the bags in this way. Finally, the treatment of laxity of the lower eyelid depends on the severity of this, and we use the resurfacing of the skin with CO₂ or [6] Erbium laser according to the skin tone of the patient. Sometimes it is also necessary to use techniques for tensing the eyelid structures such as canthopexy. In some cases, it may be necessary to remove a small amount of lower eyelid skin [7].

Complications

Complications of blepharoplasty are rare when performed by an expert surgeon. The most serious and infrequent are those that can affect the vision and the ocular surface, the retraction of the eyelid [8], or the infection. These can cause dry eye, keratitis and blindness. Less serious, although more frequent, are the slight asymmetries, the insufficient correction of the skin or the pouches, or the conjunctival edema [9,10]. With the transconjunctival technique we can avoid complications such as ectropion, visible

sclera and changes in the shape of the eye and the expression of the look.

Conclusion

The goal of blepharoplasty is to restore a more youthful appearance to the eyelid, maintaining the features of each person, providing a natural appearance, avoiding visible scars and protecting eye health. The evolution of surgical techniques in recent years has been the result of better knowledge of facial aging processes. The most important change has been the adoption of Technology as CO₂ Laser and less invasive and more conservative techniques such as transconjunctival access, seeking greater preservation and more tissue in the eyelid in order to avoid "empty" eyes or skeletonized. Blepharoplasty is usually done with local anesthesia, and in many cases intravenous sedation is also used for greater patient comfort. General anesthesia is used when at the same time we perform other more invasive surgeries. The duration of the surgery is very variable, from 30 minutes to 1 hour generally. The recovery after surgery is characterized by the appearance of a little edema that improves with the application of cold during the first week. It is a usually painless process. The complete recovery can take between 3 and 6 days and the scars improve during 4 to 6 months.

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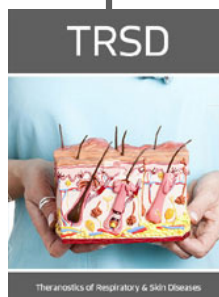
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