The use of the Orbicularis Retaining Ligament in the treatment of lower eyelid malposition

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Abstract

Background: Blepharoplasty is recognised as one of the most prominent cosmetic procedures. Over the past decade, various techniques have been developed merely for the purpose of minimizing the complications that may follow this surgery. Surgical revision rates related to lower lid malposition are considered to be 3.5 percent of all procedures. The loss of eyelid support and consequent eyelid malposition is a challenging diagnostic and surgical problem. The treatment is usually based on adding posterior lamellar (spacers) or anterior lamellar (skin grafts). The detailed description of retaining ligaments and their relationship with other orbicularis structures offered us an alternative approach in treatment of eyelid retraction. In the present study, we verified the effectiveness of the resection of the orbicularis retaining ligament and eyelid repositioning in patients with lower eyelid retraction following blepharoplasty.

Methods/Technique: Sixty-seven patients with diagnosed lower eyelid malposition were treated surgically with this technique between 2004 and 2012. The age ranged between 37 and 64 years. The patients were referred to our specialist center from various hospitals around the country. The original surgery had been performed by different surgeons in all cases. The patients had all underwent previous lower blepharoplasty with subsequent eyelid retraction. All patients had their fat bags removed through the orbicularis oculi muscle. The corrective procedure entailed a partial resection of the orbicularis retaining ligament with subsequent lower eyelid suspension to an upper position on lateral orbital rim. The patients were followed up 3 to 6 months after the operation.

Results/Complications: In all cases, a better position of the lower eyelid margin was achieved when the orbicularis retaining ligament was sectioned. This technique successfully treated lower eyelid malposition in all patients. (Figures 1,2)

Figure 1 – Patient 62 years old 2 months after lower blepharoplasty.

Figure 2 – Same patient, 6 months after correction of the eyelid retraction with the proposed technique.
Conclusion: The technique presented by the authors has been shown to be effective on the selected group of patients. Moreover, the association of spacers or skin grafts was avoided. Furthermore, it is easily reproducible and can be safely used as a simple alternative by surgeons who are not accustomed to have complex oculoplastic procedures in their practice.