

Recurrent upper eyelid trichomatous entropion repair: long-term efficacy of a five-step approach

Abstract:

Purpose: To describe the lid characteristics of recurrent upper eyelid trichomatous entropion and to report the long-term outcomes of a five-step surgical approach based on the principles of upper eyelid crease lamellar splitting and retractor release with redirection.

Subjects and methods: Retrospective case review of adult patients with recurrent upper eyelid trichomatous entropion who had undergone surgical correction using the five-step surgical technique between March 2014 and March 2018. Cases with primary entropion and/or <2 years of follow-up were excluded from this series.

Main outcome measures: Eyelid deformities (type of trichiasis, anterior lamellar laxity, lid margin abnormality, lid retraction and lagophthalmos), recurrence of entropion and trichiasis, cosmetic satisfaction, and surgical complications.

Results: Forty-two upper eyelids in 33 patients met inclusion criteria. Preoperative anterior lamellar laxity was present in 36 eyelids (85.7%), lid retraction in 31 eyelids (73.8%) with a mean preoperative MRD1 of 6.48 ± 1.1 mm, atrophic tarsus in 28 eyelids (66.7%), lid margin notching in 22 eyelids (52.4%), and lagophthalmos in 15 eyelids (35.7%). The surgical success rate was 92.9% (95% CI 0.805–0.985). There was no documented recurrence of entropion over a mean follow-up period of 31.79 months. Postoperative trichiasis without entropion occurred in three eyelids, which required repeat epilation.

Conclusions: The five step-approach based on the principles of lamellar splitting is effective in correction of recurrent trichomatous entropion with long-term stability. The procedure addresses the fundamental changes frequently seen in recurrent cases, in particular anterior lamellar laxity, scarred shortened posterior lamella, and trichiasis.