

Case Report

Ocular Rosacea Complicated By Bilateral Ectropion: A Case Report

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Abstract

The most common ocular manifestations of rosacea include chronic blepharitis, conjunctival fibrosis, punctate keratitis, corneal ulceration, peripheral neovascularization. Cicatricial ectropion is rarely reported as a complication of this pathology, physiopathologie seems to be related to a type IV hypersensitivity reaction in the conjunctival tissue.

We report the case of a patient with bilateral ectropion, secondary to ocular rosacea, with alteration of the break-up time (5 seconds), an eversion of lacrimal punctum which is fibrotic and a crust on the free margin of the eyelid, we also found conjunctival fibrosis, punctate epithelial keratitis.

Introduction

Rosacea is a common chronic inflammatory dermatosis affecting approximately 10% of the population [1]. Rosacea affects the axial facial skin, more specifically, cheeks, chin, nose, and central forehead. The manifestations include transient or persistent erythema, telangiectasias, papules, pustules, and phymatous changes [2].

Ocular manifestations of rosacea include chronic blepharitis, chronic conjunctivitis, conjunctival fibrosis, punctate epithelial and interstitial keratitis, corneal ulceration, peripheral neovascularization, and peripheral ulcerative keratitis [3].

We report the case of a patient with bilateral ectropion, secondary to ocular rosacea. To our knowledge, this ocular complication is little described in the literature.

Case Report

A 68 years old woman was referred to our structure for the management of bilateral ectropion. She relates this manifestation 18 years ago which progressed gradually. Previously, the patient had been followed for 30 years for rosacea with multiple periods of exacerbation per year, with poor compliance with treatment.

In her ocular examination, the patient's best-corrected visual acuity was 3/10 OD, 4/10 OG, with a normal intra ocular pressure. Her ocular motility and pupil reflex were normal in both eyes. The external examination revealed cutaneous rosacea with rhinophyma and cicatricial ectropion in both eyes. The

cicatricial ectropion was characterized by lower eyelid eversion. Biomicroscopy revealed an augmented lacrimal river, eversion of lacrimal punctum which is fibrotic and a crust on the free margin of the eyelid. We found conjunctival fibrosis, punctate epithelial keratitis and alteration of the break-up time (5 seconds). The rest of the ophthalmological exam revealed a sub-capsular cataract without other anomalies.

We proposed an ocular surface treatment to our patient, by artificial tears drops with high concentration of hyaluronic acids and vitamin A. Also, stabilization of her rosacea by dermatologist, then we proposed the patient for a surgical treatment of her ectropion.



Figure 1: Image showing cutaneous rosacea in our patient with rhinophyma.

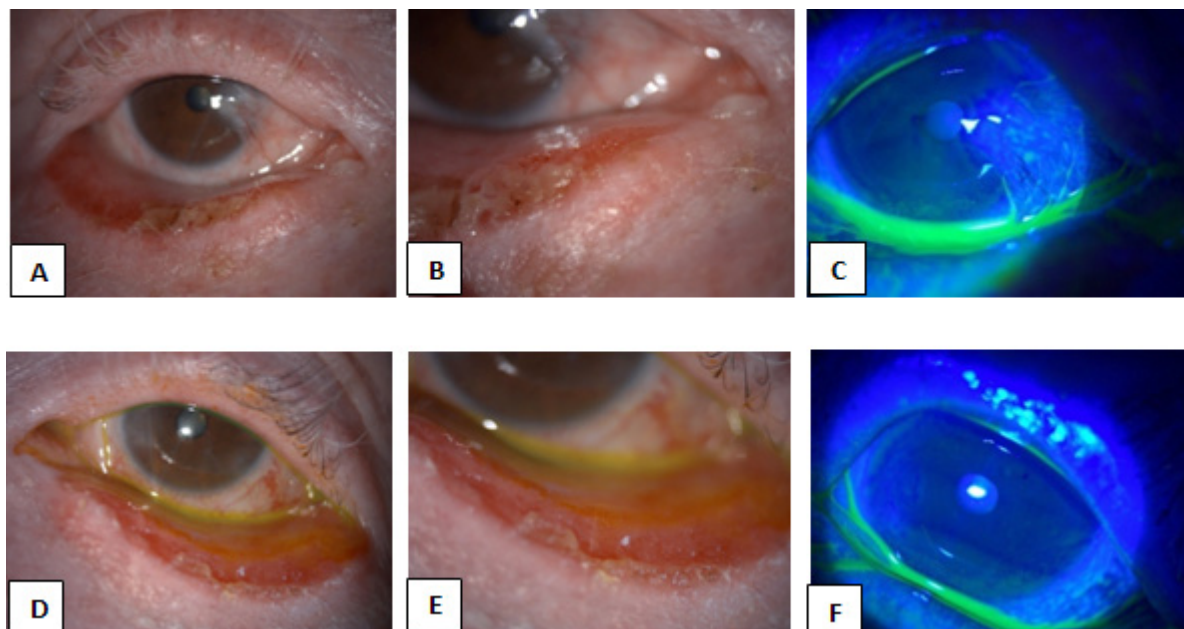


Figure 2: A/B/C: Right eye D/E/F: Left eye
 A/D- Ectropion and crust in the free margin of the eyelid
 B/E- Fibrotic lacrimal punctum
 C/F- Punctate epithelial keratitis and augmented lacrimal river

Discussion

Cicatricial ectropion may be caused by brevity of the anterior lamella following a burning of the face, a trauma or excessive skin excision post-blepharoplasty. Also, chronic dermatitis may be responsible of this type of ectropion [4,5]. De Groot et al. affirm that inflammatory conditions of the periorbital skin participate in apparition of cicatricial ectropion [6]. This inflammatory state is found in multiple infectious and immunologic diseases such as ichthyosiform erythroderma, xeroderma pigmentosum, toxic epidermal necrolysis, leprosy, epidermolysis bullosa, dermatomyositis [7,8].

Multiple studies have reported association between autoimmune disease and ectropion. In a case report published on 2012, severe chronic blepharitis and scarring ectropion were associated with discoid lupus erythematosus [9]. Psoriasis arthritis was also found to cause cicatricial ectropion in on other recent reports [10]. But to our knowledge, cicatricial ectropion due to rosacea was the first time described in 2004 by the Chicago medical university. Our study reinforces this finding and special attention is needed to prevent this complication in ocular rosacea patients.

The main physiopathological pathway seems to be type IV hypersensitivity reaction in the conjunctival tissue which is seen in ocular rosacea [3]. This chronic reaction appears to be responsible for the retraction of tissues which is complicated by cicatricial ectropion. Cruz et al. founded that 2.5% of their 439 patients with paracoccidioidomycosis experienced cicatricial changes that induced eyelid malpositions such as entropion or ectropion which affirms the relationship between chronic conjunctivitis and eyelid malpositions [11].

Conclusion

Cicatricial ectropion is one of the common types of ectropion that has been described. Inflammatory disorders such as rosacea could be one of the causes of this cicatricial eyelid malposition. Optimal treatment of rosacea and all other inflammatory disorders is mandatory to prevent the cicatricial ectropion.

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