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Isolated Conjunctival Lichen Planus: A Diagnostic Challenge

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Abstract | **Case Report**

Lichen planus is a common inflammatory autoimmune disease of unknown etiology that commonly affects the skin and mucous membranes. Isolated conjunctival lichen planus is an exceptional condition that most commonly involves the eyelids, conjunctiva, and cornea, leading to severe scarring, and is clinically indiscernable from other causes of cicatricial conjunctivitis.

Keywords: Isolated conjunctival lichen planus, chronic bilateral blepharitis, fibrosing conjunctivitis.

INTRODUCTION

Lichen planus is a common inflammatory autoimmune condition of unknown etiology, usually affecting the skin and mucous membranes. Isolated ocular lichen planus is an extremely rare presentation resulting in severe scarring, and is clinically indistinguishable from other causes of cicatricial conjunctivitis. We report the case of a patient with isolated ocular lichen associated with chronic bilateral blepharitis.

Objective: To draw attention to an extremely uncommon clinical presentation that threatens visual prognosis.

CLINICAL CASE

A 69-year-old female patient with Ryenolds syndrome since 2021, on general corticosteroids and Azathioprine which she discontinued after 3 months, presented with chronic fibrosing conjunctivitis in relapse, resistant to symptomatic treatment. Ophthalmological examination revealed conjunctival hyperemia, blepharitis, meibomitis and bilateral symblepharon (Figure 1). The rest of the examination revealed no cutaneous, oral or genital lesions. A direct immunofluorescence biopsy revealed a lichen, with no IgG, IgA, IgM or C3 deposits. The patient was put on local corticoids, with a good evolution (Figure 2).

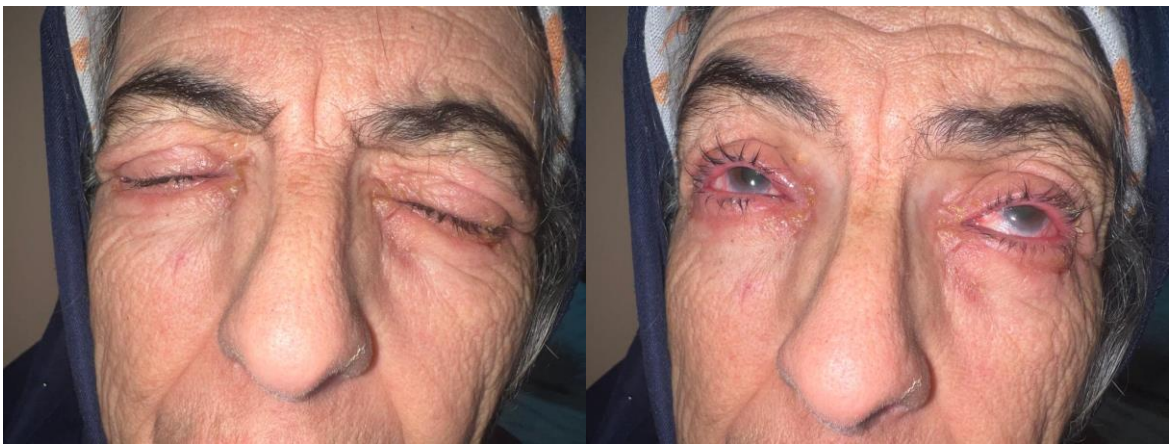

Figure 1(a, b): Patient with treatment-resistant bilateral blepharitis with fibrotic conjunctivitis

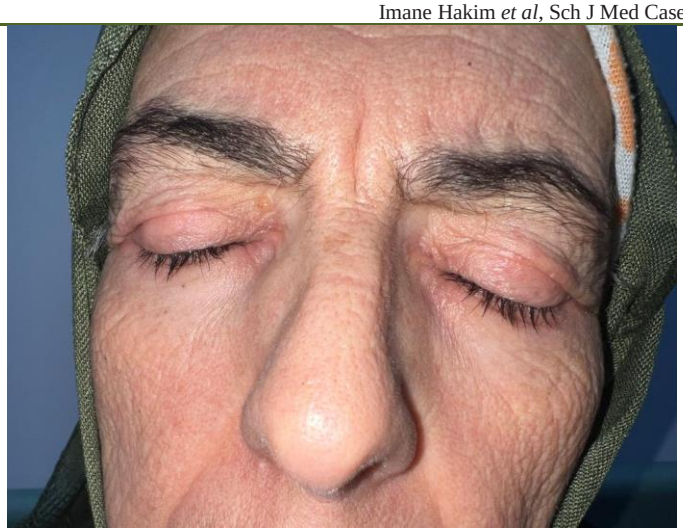

Figure 2: Patient reviewed with good improvement after 10 days of dermocorticoids.

DISCUSSION

Lichen planus (LP) is an inflammatory condition of the skin and mucosa with no known cause. Available evidence points to a T-cell-mediated immunological response to an antigenic change induced in the basement membrane zone of the mucosa or skin. It appears as pruritic purplish papules and plaques, most often found on the wrists, lower back and ankles. The oral mucosa and tongue are the most frequently affected sites, and lesions on other mucosal surfaces, such as the anus, genitals and upper aerodigestive tract, can also occur. Ocular lichen planus is a rare disease that has been increasingly reported in the literature over the past two decades involving the conjunctiva, cornea and lacrimal drainage system [1].

Thorne *et al*., [2] characterized 6 cases of LP with scarring conjunctivitis, only one of which, a 51-year-old with bilateral symblepharon, presented with exclusive ocular involvement. The diagnosis was confirmed by histopathological findings, as in our patient.

The differential diagnosis of this unusual and severe subtype of LP must be established with other clinically indistinguishable diseases manifesting as cicatricial conjunctivitis, such as mucosal pemphigoid, pemphigus vulgaris, graft-versus-host disease, Stevens Johnson syndrome and paraneoplastic pemphigus [3, 4].

Definitive diagnosis is crucial because persistent, chronic inflammation can lead to progressive subepithelial fibrosis, synechiae, secondary dry eye, entropion, trichiasis and corneal opacification, which are invariably associated with severe visual acuity loss and blindness.

First-line medications include topical corticosteroids and cyclosporine. In psoriasis with ultraviolet light, patients who do not respond to topical treatments may benefit from systemic treatment with systemic corticosteroids and other immunosuppressants such as Cyclosporine, Cyclophosphamide, Azathioprine or Mycophenolate Mofétil [5]. After resolution of the acute inflammation, the patient must be treated with long-term maintenance therapy to halt chronic disease progression.

CONCLUSION

Isolated conjunctival lichen planus remains a rare and severe cause of cicatricial conjunctivitis. Distinguishing this exceptional presentation from other inflammatory diseases with conjunctival involvement is crucial for early initiation of appropriate therapy to avoid irreversible damage to visual function.

REFERENCES

1. Muñoz, E. R., Martínez-Escala, M. E., Juanpere, N., Armentia, J., Pujol, R. M., & Herrero-González, J. E. (2011). Isolated conjunctival lichen planus: a diagnostic challenge. *Archives of dermatology*, *147*(4), 465-467.
2. Thorne, J. E., Jabs, D. A., Nikolskaia, O. V., Mimouni, D., Anhalt, G. J., & Nousari, H. C. (2003). Lichen planus and cicatrizing conjunctivitis: characterization of five cases. *American journal of ophthalmology*, *136*(2), 239-243.
3. Neumann, R., Dutt, C. J., & Foster, C. S. (1993). Immunohistopathologic features and therapy of conjunctival lichen planus. *American journal of ophthalmology*, *115*(4), 494-500.
4. Hutnik, C. M., Probst, L. E., Burt, W. L., Hooper, P. L., Tokarewicz, A. C., & Heathcote, J. G. (1995). Progressive, refractory keratoconjunctivitis associated with lichen planus. *Canadian journal of ophthalmology. Journal canadien d'ophtalmologie*, *30*(4), 211-214.
5. Crompton, D. O. (1968). Immuno-suppressive drug treatment of keratitis sicca, including an example of lichen planus of the conjunctiva. *Australian and New Zealand Journal of Surgery*, *38*(2), 143-146.

6. Diniz, C. M., Vieira, L. A., Rigueiro, M. P., Vasconcelos, M., & de Freitas, D. (2008). Lichen planus leading to bilateral cicatrizing keratoconjunctivitis: case report. *Arquivos brasileiros de oftalmologia*, *71*(6), 881-885.
7. Brewer, J. D., Ekdawi, N. S., Torgerson, R. R., Camilleri, M. J., Bruce, A. J., Rogers III, R. S., ... & Baratz, K. H. (2011). Lichen planus and cicatricial conjunctivitis: disease course and response to therapy of 11 patients. *Journal of the European Academy of Dermatology and Venereology*, *25*(1), 100-104.
8. Eisen, D. (1999). The evaluation of cutaneous, genital, scalp, nail, esophageal, and ocular involvement in patients with oral lichen planus. *Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology, and Endodontology*, *88*(4), 431-436.
9. Hahn, J. M., Meisler, D. M., Lowder, C. Y., Tung, R. C., & Camisa, C. (2000). Cicatrizing conjunctivities associated with paraneoplastic lichen planus. *American journal of ophthalmology*, *129*(1), 98-99.
10. Rhee, M. K., & Mootha, V. V. (2004). Bilateral keratoconjunctivitis associated with lichen planus. *Cornea*, *23*(1), 100-105.
11. McNab, A. A. (1998). Lacrimal canalicular obstruction in lichen planus. *Orbit*, *17*(3), 201-202.