Chronic blepharitis like picture in Discoid lupus erythematosis – Case series

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Abstract

Background: Blepharitis is a very common condition encountered in ophthalmology outpatient care department. Dermatological diseases like seborrhoeic keratopathy and rosacea have been frequently discussed as being associated with blepharitis. However Discoid lupus erythematosis [DLE], an autoimmune condition has only rarely been reported to involve the eyelids mimicking blepharitis. DLE affecting the eyelids can produce significant morbidity with lid deformities, trichiasis and symblepharon if left untreated. Objective: To report three consecutive cases of DLE with eyelid lesions mimicking blepharitis. They presented to the department of ophthalmology at our institute from April 2014 to March 2016. The first case presented with involvement of lower eyelid in one eye. She was having multiple skin lesions which on biopsy confirmed the diagnosis of DLE. The second case was a diagnosed case of DLE who received treatment 4 years back and came with relapse of the disease affecting the eyelid. The third case was a recently biopsy confirmed case of DLE with multiple skin lesions along with bilateral eyelid involvement. Two of them had madarosis and one case had destruction of the outer lid margin at presentation. All three cases responded well to treatment with Hydroxychloroquin. Conclusion: The discoid lesions of DLE affecting the eyelids can mimic the appearance of chronic blepharitis. Ophthalmologists should be aware that DLE is a possibility while dealing with an atypical case of chronic blepharitis. Early diagnosis and treatment can prevent deformities of eyelid.

Key words: Discoid lupus erythematosis, blepharitis, lid margin, Hydroxychloroquin
A chronic blepharitis is simulated by conditions like infiltrating lid tumours, discoid lesions of Discoid lupus Erythematosus (DLE) etc.

Aubaret in 1930 reported the first case of chronic blepharitis like picture in patients with DLE; and after 30 years Duke-Elder (1965) reported additional cases. Lupus erythematosis is a chronic inflammatory autoimmune condition that has a plethora of clinical presentation and Discoid lupus erythematosis is a subset of chronic cutaneous lupus erythematosis. This is the commonest variety accounting for 50-85% of cutaneous lupus (Okon.L.G et al, 2013; Kuhn. A et al, 2005). DLE may occur in the absence of systemic disease or in association with SLE.

A systematic review with meta-analysis of reported cases of the ocular complications in cutaneous lupus, published in 2015 found that a total of 71 cases had been reported in literature till then describing the ocular complications of Discoid Lupus (L. Arrico et al, 2015). Only 3 cases of ocular involvement in DLE have been reported from India so far (Pandhi.D, et al, 2006; Parmar NV et al, 2016).

We report a series of 3 cases presented to the Department of Ophthalmology at our Institute from April 2014 to March 2016 that had lesions of eyelid simulating chronic blepharitis which were finally diagnosed as the discoid lesions of DLE and treatment with Hydroxychloroquin resulted in a complete resolution.

**Case 1**

42-year-old housewife presented with the complaint of a reddish discolouration of the Left lower eyelid for the past 1 year. She was on treatment with steroid eye ointment intermittently along with measures of lid hygiene which relieved the lesion only partially. On examination a reddish lesion involving the inner two third of the lower eyelid margin with minimal greasy scaling on the surface was noted.

**Figure 1:**
A. Left lower lid margin is reddish with scaling
B. Arrow shows the border of the affected lid margin from normal lid margin
(Fig 1) There was no madarosis. There was a definite border delineating this affected area from the rest of normal looking lid margin. The upper eyelid of the Left eye and the eye lids of Right eye were unaffected.

**Figure 2:** Lesions on lip, ear, scalp
A detailed general examination revealed multiple well defined erythematous patches
with scaling on the surface involving the lower lip, upper chest, ear and scalp (Fig 2). The lesion on scalp showed localised alopecia. The patient was never concerned about these lesions even though she was aware of their presence. Dermatology opinion was in favour of the possibility of Discoid lupus erythematosis. Skin biopsy from the lesion over chest showed mild hyperkeratosis, basal cell vacuolation and lymphocytic dermal infiltrate confirming the diagnosis of Discoid Lupus Erythematosis

**Figure 3:** Skin biopsy showing mild hyperkeratosis, basal cell vacuolation and lymphocytic dermal infiltrate

(Fig 3). Serology testing for ANA was negative. Patient was started on Tab. Hydroxychloroquine 200 mg BD along with topical application of steroid eye ointment. On follow up all the lesions were found to have subsided well with treatment.

**CASE 2**

52-year-old lady with a history of reddish discoloration and scaling of the right lower eyelid of 6 months duration (Fig 4). She was applying steroid eye ointment as per the advice from an ophthalmologist with which she did not get much improvement. Examination showed an erythematous lesion at lid margin affecting the outer two third portion. There was a reddish patch near the medial canthus also. This lesion had greasy scales on the surface with madarosis. She was diagnosed to have biopsy proven DLE 4 years back for which she had taken treatment for more than a year. She did not have any lesions affecting the eyelid at that time. Dermatology opinion was taken and confirmed the relapse of DLE and was started on Hydroxychloroquin along with topical steroid ointment. Patient improved well with treatment

**Figure 4:** Lowerlid margin is erythematous with scaling

**CASE 3**

37-year-old female who was having recent onset of multiple skin lesions and was diagnosed as DLE, confirmed by biopsy in the department of dermatology came to ophthalmology Out Patient Department because of the presence of similar patches in the eyelids. She had a reddish lesion of the right lower lid near the outer canthus with thick greasy scales on the surface, destroying the outer margin

**Figure 5:** A: Erythematous discoid lesion with scaling and destruction of outer lid margin and madarosis of right lower lid
B: Left lower lid showing two discoid lesions (Fig 5, A). There were similar lesions in the left lower lid close to inner canthus (Fig 5, B). The lesions were very similar to the discoid lesions found over chest and face. She was prescribed Tab. Hydroxychloroquine 200 BD along with topical steroid ointment. The lesions were well regressing during follow up visit.

**Discussion**

Discoid Lupus Erythematosis classically presents with erythematous or violaceous scaly plaques that often result in scarring and atrophy. Ocular manifestations of DLE reported in the literature include periorbital oedema, blepharitis, madarosis, lid scarring, entropion and ectropion, trichiasis, panniculitis, conjunctivitis, hypertrophic/verrucous lesions, and stromal keratitis (Ziv.R et al ,1986; Magee.K.L et al,1991; Thorne.J.E et al,2002; Arrico.L et al ,2014). Females are 2 to 3 time more commonly affected than males .The age group predominantly affected was in the range of 20 – 40 years (Walling H. W., Sontheimer R. D,2009). Increased exposure to sun exacerbates the condition (Cardinali C et al,2000). All the patients reported in this case series were females aged 35 to 55. Eyelid manifestation was the presenting symptom in one case which led to the diagnosis of DLE, whereas the other two cases were already diagnosed cases of DLE.

The lesions affecting the lids were not involving the entire lid margin and were not bilaterally symmetrical. The lesions were patchy in nature with a well demarcated border from the normal area. This was in contrast to chronic blepharitis in which the entire lid margin is involved bilaterally. The asymmetrical patchy involvement seen here was pointing to a diagnosis other than a chronic blepharitis.

Histological examination of a longstanding active DLE lesion reveals hyperkeratosis, dilated compact keratin-filled follicles, vacuolar degeneration of the basal keratinocytes, and an intensely inflammatory dermal infiltrate. DLE of the eyelids can produce significant morbidity with lid deformities, trichiasis and symblepharon if left untreated (Frith P, 1990). None of these patients had any serious lid deformities except the madarosis in two cases and destruction of outer lid margin one case. The risk of progression of DLE to systemic lupus erythematous is reported as 16.7% (Gronhagen CM, et al, 2011). Oral antimalarial like Hydroxychloroquin is a safe and effective treatment in managing the discoid lesions of DLE. All patients in this series showed good response to the treatment with Hydroxychloroquin.

**Conclusion**

DLE is a possibility to be kept in mind when dealing with an atypical case of blepharitis which is refractory to the routine management. In such cases looking for similar lesions in the sun exposed areas and proceeding with a biopsy from a suspected lesion may help in making a definitive diagnosis and initiating early treatment. Awareness among ophthalmologists that the discoid lesions of DLE can mimic chronic blepharitis is helpful to make an early and accurate diagnosis. This would be rewarding as it prevents the lid deformities that may occur with a delay in initiating the specific treatment.

**References**


