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# Ocular findings in discoid lupus erythematosus-A case report

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# Abstract

Discoid lupus erythematosus (DLE) is an autoimmune disorder which encompasses broad range of dermatologic manifestations. Ocular manifestations are rare and ocular involvement has been reported in very few cases. They are often misdiagnosed as blepharitis or eczema. Here we report a case of DLE with ocular involvement.

# Introduction

Discoid lupus erythematosus (DLE) is an autoimmune disorder which encompasses broad range of dermatologic manifestations. These manifestations can occur without systemic involvement and can be only presenting feature of this disease. DLE cases have female preponderance and frequently affect head, face, neck and other sun exposed areas <sup>[1, 2]</sup>. Ocular manifestations are rare in DLE. Only few cases of ocular involvement are reported <sup>[3, 4]</sup>. These lesions often remain undiagnosed and can also be misdiagnosed as chronic blepharitis or eczema <sup>[5]</sup>.

#### **Case report**

A 40 year old female patient came to Department of Ophthalmology with history of foreign body sensation and excessive watering of right eye for almost 6 months (Figure 1). Patient has consulted many physicians and was treated as chronic blepharitis. Her symptoms were not relieved by the treatment. No history of previous surgery, trauma and eye infection was recorded. She is a non-diabetic and non-hypertensive patient. General physical examination was done to rule out systemic manifestation. During local examination, mild thickening was seen in right lower eyelid (Figure 2). On further examination, visual acuity was recorded as 6/6 in both the eyes. On slit lamp examination of right lower eyelid, lid thickening and madarosis was seen. Left eye was within normal limits. Fundus examination, colour vision, intraocular pressure and pupillary reactions were normal. Tear film breakup time and Schirmer test were done and were found to be within normal limits. A reference of dermatologist was done in view of above findings. After careful examination of the lesion, provisional diagnosis of DLE was made based on irregular, raised, scaly lesion on right lower eyelid of the patient. Histopathology was advised and biopsy was taken. The findings revealed perivascular and periadnexal lymphohistiocytic infiltrate with interface dermatitis (Figure 3). There is degeneration of basal layer with thickening of basement membrane.

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Special stain PAS was done to confirm basement membrane thickening. Based on these findings DLE diagnosis was confirmed. She was treated with Tablet Hydroxychloroquine 200mg twice daily for 6 weeks and a gradual improvement in her condition was noted <sup>[6, 7]</sup>. Lubricating eye drops was given for symptomatic relieve. After due course of treatment she became asymptomatic.



Fig 1: A clinical Photograph of the patient with DLE of right lower eyelid



Fig 2: Clinical photograph of patient with DLE showing closer look of right lower eyelid

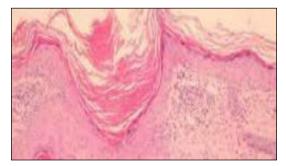


Fig 3: Histopathological image of skin biopsy of DLE patient

# Discussion

Discoid Lupus Erythematosus is predominantly an autoimmune disorder with wide range of signs and symptoms. This disease usually affects women in fourth to fifth decade of life. In our case women is of 40 years of age. Most of the discoid lesions are present is sun exposed areas like scalp, neck, ears, cheeks and head <sup>[1]</sup>. It can also involve mucosa lined surfaces like nasal mucosa and oral mucosa <sup>[2]</sup>.

Ocular involvement in DLE is uncommon. Various ocular manifestations have been reported in DLE which include blepharitis, periorbital oedema, madarosis, trichiasis, panniculitis, conjunctivitis and verrucous lesions <sup>[8, 9]</sup>. Blepharitis is the most common sign and most commonly occurs bilaterally. In few cases it can be unilateral <sup>[5]</sup>.

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Inferior eyelid is most commonly involved in DLE and appears as slightly infiltrated plaques with or without scales <sup>[3]</sup>. Histopathology and immunopathology helps in diagnosis of this disease. A full thickness biopsy needs to be taken for accurate diagnosis.

Most important differential diagnosis is chronic blepharitis. Standard blepharitis treatment results in poor results. DLE induced blepharitis is common in females and predominantly occurs in middle age. Most patients respond to hydroxychloroquine, immunosuppressant's may be considered in resistant cases <sup>[8, 10]</sup>.

# Conclusion

Ocular complications are rare and can involve other areas of eye. Training of ophthalmologist to this uncommon condition is necessary so that these cases are not missed. Team work is also crucial in these conditions and a referral to specialist is must.

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