# A Clinical Case Report on Discoid Lupus Erythematous

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## **ABSTRACT:**

Women are around ten times more likely than men to get SLE. The prevalence of isolated cutaneous lupus erythematosus (CLE) is somewhat greater than that of systemic lupus erythematosus (SLE) across Europe and the US, ranging from 4-4.3 cases per 100,000 people (approximately 3 cases per 100,000 population). Author presented a 60-year-old female who came to a tertiary care hospital with the chief complaint of red-colored lesions on the scalp, lower back, and upper limb in the last 3 months, fever rashes on the body, and pain Sensitivity to light (photosensitivity) in the last 3days. The patient had a history of difficulty in eating food and a history of drug intake before the onset of the lesion. All necessary investigations carried out history collection, and physical examination found that cutaneous multiple erythematous plaques are present on the scalp with crusting and scaling. Blood investigation has done HB 10% which decreases, Red Blood Cells - Normocytic hypochromic. Adequate Platelets saw in the smear. anti-nuclear antibodies 1.172. skin biopsy shows diagnosed Discoid lupus erythematous. Cutaneous examination: multiple erythematous plaques are present on the scalp with crusting and scaling hyperpigmented plaques with crusting is present on the back. ANA (Anti-Nuclear Antibodies) reports - 1.172(detectable) positive. After that dermatologist diagnosed Discoid lupus erythematous and started treatment according to symptomatic. Tab Omnacortil 40 mg for 7 days, Tab HCQ 200 mg for 8 days, Tab pan 40 mg for 8 days, Tab vitcofol Hb for 6 days, Tab OSTEOFOS 70mg once a week with 2 glasses of water, Tab shellac 500mg for 2 days, Cap daily shine 60kiu Once a week, L/a clop g cream for 7 days (back, upper limb), L/a solvate ointment (scalp, back, UL) for 4 days, L/a Fusirose lotion (on the scalp) for 8 days L/a pp soaks for 1 (over scalp lesion)for 8 days. After that patient is discharged and the doctor advises follow-ups in Dermatology OPD. The patient's general condition improved and is stable.

**Keywords:** Discoid lupus erythematosus, Anti-Nuclear Antibodies, Hyperpigmentation, hyperkeratotic surface, Photosensitivity, Necrosis.

#### INTRODUCTION:

The multisystem condition lupus erythematosus primarily affects the skin. Skinny lupus comes in various forms. Subacute cutaneous lupus, Acute cutaneous lupus (ACLE), and discoid lupus are the three most prevalent kinds (DLE). The most popular types of cutaneous lesions in lupus erythematosus were described by Dr. James Gilliam. Gilliam divided skin non-specific and specific skin categories based on whether interface dermatitis was seen during aninvestigation. DLE is the most widespread chronic lupus erythematous subtype. While lesions are usually picture spread or had a tendency to have consequents carring or atrophy, these clients may or may not experience photosensitivity. The majority of DLE patients have mild to moderate systemic illness. Twenty percent of clients throughlupus erythematous subtypes may also experience DLE as a symptom. 

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It is an autoimmune illness that affects the connective tissues and causes inflammation. It is caused by a lack of immunological tolerance and is characterized by immune complexes and pathogenic autoantibodies. Contrary to complete lupus erythematosus, CDLE is characterized by cutaneous inflammatory penetrates that are dominated by Th1 cells rather than Th17 cells. However, the etiology of CDLE is not known to involve circulating inflammatory cells and autoantibodies.<sup>2</sup>

The most prevalent type of chronic cutaneous erythema is known as DLE, and it can manifest locally (80% of the time), bythe ears, scalp, or face and disseminated (20%), or below the neck. The chance of developing SLE increases by up to 28% in the diffused form of it, particularly after it affects the trunk. The presence of discoid lesions on the lower part of the neck without lesions and the upper part of the neck is rare. On conjunctiva, nasal mucosa, lips or vaginal mucosa discoid lesions can occasionally form. A photo distribution is present in certain clients through discoid lesions. It appears that when sun exposure contributes to the growth of lesions. However, there is no conclusive evidence linking sun exposure to the development of discoid lesions in people who have sun-protected skin. The initial morphological symptom of it is a definite, annular erythematous patch or plaque of different sizes, which is followed by an adherent skin condition called follicular hyperkeratosis. The "carpet tack sign" is made visible by eliminating the adhering scale, which reveals keratotic spikes that are the size of hair follicles. The lesions leave behind depressed core atrophy, scarring, telangiectasia, and hypopigmentation as they steadily enlarge with active inflammation and hyperpigmentation at their perimeter. DLE has the potential to lead to permanent scarring alopecia on the scalp. Squamous cell carcinomas are rare; however, they can occur in 2 to 3 percent of long-lasting discoid lesions and are frequently indicative of a bad prognosis. Even while arthralgias may be present in discoid lesion patients when they first show, only 10 to 20 percent of these individuals eventually match the criteria for SLE. Hypertrophic Discoid Lupus erythematosus is an infrequent form of Discoid Lupus erythematosus that is present by verrucous hyperkeratotic plaques.<sup>4</sup>

#### **CASE PRESENTATION:**

The author presented a 60-year-old female who came to the tertiary care hospital with a chief complaint of redcolored lesions on the scalp, lower back, and upper limbin the last 3 months, fever rashes on the body, pain Sensitivity to light (photosensitivity) in the last 3days. The patient had a history of difficulty in eating food and a history of drug intake before the onset of the lesion. All necessary investigations carried out history collection, and physical examination found that cutaneous multiple erythematous plaques are present on the scalp with crusting and scaling. Blood investigation has done HB 10% which decreases, RBCs - Normocytic hypochromic. Platelets - Adequate on smear. No Haemoparasite seen. Urine examination done urea 17, Creatinine 0.8, Sodium (Na+) 138, Potassium (k+) 4.4. RBS-Glucose-Plasma Random 86, anti-nuclear antibodies 1.172.skin biopsyshows diagnosed Discoid lupus erythematous. Cutaneous examination: multiple erythematous plaques are present on the scalp with crusting and scaling hyperpigmented plaques with crusting is present on the back. ANA(Anti-Nuclear Antibodies) reports - 1.172(detectable) positive. Ophthalmic call I/V/O HCV therapy, ADV: fundus examination is normal. After that dermatologist diagnosed Discoid lupus erythematous and started treatment according to symptomatic. Tab Omnacortil 40 mg for 7 days, Tab HCQ 200 mg for 8 days, Tab pan 40 mg for 8 days, Tab vitcofolHb for 6 days, Tab OSTEOFOS 70mgonce a weekwith 2 glasses of water, Tab shellac 500mg for 2 days, Cap daily shine 60kiuOnce a week,L/a clop g cream for 7 days [back, upper limb], L/a solvate ointment (scalp, back, UL) for 4 days, L/a fusirose lotion[on scalp] for 8 daysL/a pp soaks for 1 [over scalp lesion] for 8 days. The patient's general condition is stable. After that patient is discharged and the doctor advises follow-ups in Dermatology OPD.

### **DISCUSSION:**

The most prevalent type of chronic cutaneous lupus erythematosus is DLE. Traditional Discoid Lupus erythematosus lesions start as tiny, reddish-purple plaques, papules, or macules that rapidly turn hyperkeratotic. The majority of individuals with untreated classic DLE lesions develop significant parts of scarring alopecia or cutaneous dystrophy which may have disturbing psychosocial effects. In this case, the author revealed that Upon examination, it was discovered that the face, scalp, and nose had erythematous, disc-like, scaly plaques that

were curative and had scarring or hypopigmentation. An evaluation of the histopathology confirmed the DLE diagnosis. For two weeks, topical steroids and antifungals were administered twice daily to the lesions.<sup>6-14</sup>

All lesions saw a significant regression after 2 weeks of treatment. Because DLE is regarded as a precancerous condition, follow-up is crucial and required every six months to discover systemic lupus erythematosus early and prevent scarring. The most recent developments in diagnostic standards and therapy have also been emphasized. LET is the type of cutaneous lupus that is most susceptible to light, according to Kuhn. The most prominent clinical characteristics include erythematous, oedematous plaques that primarily manifest on sun-exposed zonesand Orresolve without leaving scars or hypo/hyperpigmentation. Other factors for LET include distinctive histopathologic features and quick, efficient systemic antimalarial treatment in addition to the clinical appearance of the lesions. First, a perivascular and peri adnexal lymph histiocytic infiltrate in the superficial and deep dermis; second, mucin deposition in the dermis; and third, the absence of altered dermo-epidermal junction and epidermis, as opposed to lupus discoid erythematosus and SLE. 15-26

One investigator revealed that the most common prevalent type of CLE is discoid lupus erythematosus. The aim of this was to assess the symptoms, lab results, or prognosis of Thai DLE clients as well as the risk issues for systemic lupus erythematosus in DLE patients (SLE). 130 DLE patients were examined backward between January 2002 and December 2007 in our study. 66 clients (58%) had a localized form of definitive DLE, with the face being the most commonly affected area (52.3 percent). Out of 130 patients, 59 (45.4%) met the American College of Rheumatology's SLE criteria. 27 out of 59 clients(forty-five percent) had discoid lupus erythematosus, which was identified before the finding of SLE. In this group of individuals, 50% would advance and develop SLE two years after the condition started. In our investigation, the most statistically significant factor for separating clients with only discoid lupus erythematosus lesions from those who would develop SLE was the presence of antinuclear antibodies (ANA). Even after extensive follow-up, 71 patients (54.6%) had just cutaneous lesions and did not meet the criteria for SLE. When compared to data from Caucasians, our research showed a larger percentage of ANA positives, less photosensitivity, but additional SLE development uniform with similar risk variables. 27-30

One of the researchers discovered that patients with a confined variety of DLE have a lower risk of developing the systemic disease than those with a broad variant. One of the reasons that may cause lupus erythematosus is pregnancy. There are only a few case report that present generalized discoid lupus erythematosus in pregnancy that has been published online. A 24-year-old woman who was between 31 and 32 weeks pregnant reported having dark, reddish spots that were accompanied by small scales, mildly itchy and minimally irritating since about two months prior on her forehead, chin, cheeks, and ears, chest, stomach, neck, back, and extremities. ANA profile with a successful outcome. The results of the thermoscopic and histological examination are consistent with discoid lupus erythematosus. The goal of treating DLE is to enhance the client'soverall health while controlling the lesions and preventing the emergence of new ones, as well as fetal growth anomalies, preterm birth, neonatal lupus, and fetal fatalities.<sup>31</sup>

### **CONCLUSION:**

There are still a lot of unsolved questions about lupus. There is currently unknown management for this autoimmune condition, but there are numerous drugs that can be used to manage symptoms, control flare-ups, and keep the condition in remission. By educating patients, overseeing their therapy regimens, and recognizing avoidable drug-related adverse events, pharmacists and other healthcare professionals can play a crucial part in treatment. There is now ongoing research to enhance patient survival and quality of life for the numerous SLE patients affected annually. In general, prolonged corticosteroid therapy during pregnancy is safe for women with generalized DLE and SLE.

**COMPETING INTERESTS: Nil** 

FINANCIAL RESOURCE OF THE STUDY: Self CONSENT: Patient written consent had been taken.

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