

## Oral Ulcers - Revealing The Unrevealed

### Abstract

Mouth is the mirror of the body. A variety of systemic conditions exhibit oral lesions as a part of their disease spectrum. At times oral lesions might be the only presenting symptom of a systemic disease. We present a case of a 42 year old female with oral ulcers. Histopathological examination of the lesional tissue mimicked both lichen planus and lupus erythematosus. Further clinical and laboratory investigations confirmed the diagnosis of discoid lupus erythematosus.

### Key Words

Oral ulcer; Discoid lupus Erythematosus

### Introduction

Lupus erythematosus (LE) is a prototypic autoimmune disease characterized by the production of antibodies to components of the cell nucleus in association with a diverse array of clinical manifestations'. Discoid lupus erythematosus (DLE) occupies a benign spectrum of LE that is usually restricted to the skin and about 5-25% of the cases may develop SLE during its chronic course. Both genetic and environmental factors play a major role in the pathogenesis of DLE. With a prevalence rate of 17-48 per 1, 00,000, the disease has a greater female preponderance and mostly occur between the third to fifth decade of life. DLE most commonly occurs in African Americans compared to whites and Asians. Though the lesions can be clinically diagnosed, histopathology and an adjuvant immunofluorescent study helps in confirmation of the disease. Early diagnosis and prompt treatment of the lesions is mandatory as they lead to severe complications such as atrophy, scarring, alopecia and hyper pigmentation of skin thereby considerably affecting the quality of life<sup>[2]</sup>.

### Case Report

A 42 year old female patient was referred to the department of oral pathology with a chief complaint of ulcers in the lip and oral cavity for one month duration. She also complained of pain and severe burning sensation on eating. The lesions initially appeared as a vesicle and ruptured to form an ulcer. On examination a single ulcer measuring 1 X1.5cm was evident on the lower

vermilion zone of the lower lip. The central portion of the ulcer showed slight sloughing that was surrounded by a irregular erythematous area with keratotic margins. A similar ulcer was evident on the left buccal mucosa opposite to the upper premolar and molar region (Fig 1 & 2). A thorough systemic examination revealed a coin shaped pigmented macule on the right side of the nose and right shoulder (Fig 3) which was asymptomatic. Other relevant systemic illnesses were ruled out.

Histopathology of the lesions revealed a



Figure 1 : Extra Oral View Showing The Ulcer On The Lip.



Figure 2 : Intra Oral View Showing The Ulcer In The Buccal Mucosa.

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parakeratotic epithelium of varying thickness with liquefaction degeneration of the basal cells (Fig 4). Interface mucositis and perivascular inflammatory infiltration was evident. PAS (Periodic acid Schiff) staining of the sections revealed a thickened basement membrane of the epithelium and endothelium (Fig 5). With the above findings a diagnosis of lupus erythematosus was given. On review a history of photosensitivity was elicited from the patient. Histopathology of the skin biopsy from the pigmented macule



Figure 3 : Pigmented Macule On The Right Shoulder From Which The Skin Biopsy Was Taken

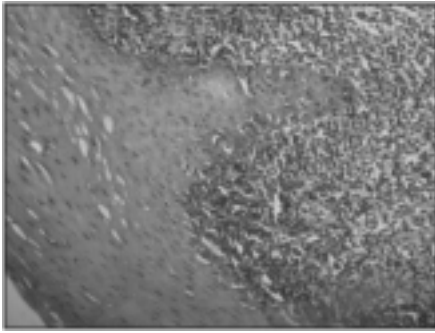


Figure 4 : Photomicrograph Showing Liquefaction Degeneration Of The Basal Cells With Interface Mucositis. (H&e 20x)

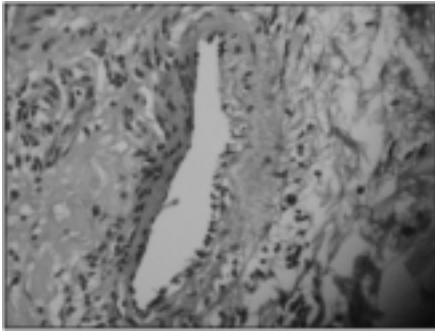


Figure 5 : Photomicrograph Depicting Thickened Blood Vessel Wall. (H&e 40x)

histopathology was suggestive of LE, history of photosensitivity and laboratory investigations demonstrating antinuclear antibodies helped us in diagnosis. Thus DLE should be considered in differential diagnosis of middle age female patients with oral ulcers, asymptomatic pigmented macules and history of photosensitivity. A thorough blood and urine investigation should be performed to rule out systemic disease in such patients. Knowledge of such conditions among physicians and dentist helps in early diagnosis and treatment which would thereby prevent potential disfiguring and improve the quality of life in such patients.

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resembled the oral lesions. Further serological investigations revealed microcytic hypochromic anemia (Hb-8.2gm/dl), leukopenia and antinuclear antibodies. However urine analysis showed no abnormal findings. By ruling out the systemic findings of SLE, the patient was diagnosed with discoid lupus erythematosus.

#### Discussion

Discoid lupus erythematosus is a chronic, scarring, atrophy producing, photosensitive dermatosis. The disease is usually categorized into three groups based on the severity. Group 1: Lesions limited to skin, Group 2: Patients with active discoid skin lesions plus visceral involvement and Group 3: OLE patients with glomerulonephritis<sup>[3]</sup>. Oral manifestations of DLE include ulcers surrounded by white striae and red plaques commonly occurring in the buccal mucosa, lips and hard palate<sup>[4]</sup>. Diagnosis of DLE in cases with minimal or asymptomatic skin lesions, pose great difficulty as the histologic features of LE mimic that of lichen planus. Most of the time the white striae around the ulcers in LE are mistaken for lichen planus. In our case the patient presented with asymptomatic hyper pigmented macules in skin; and oral ulcers were the only presenting symptom. Though the

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