



SYSTEMIC LUPUS ERYTHEMATOSUS PRESENTING WITH PREDOMINANT MUCOCUTANEOUS AND IMMUNE MEDIATED HEMATOLOGICAL MANIFESTATIONS

Rheumatology

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ABSTRACT

Systemic lupus erythematosus (SLE) is a chronic, immune complex mediated autoimmune disease characterized by multisystem involvement. We report a 19 year old female presenting with predominant mucocutaneous manifestations and immune mediated cytopenias without overt major organ involvement. Clinical features included painful oral ulcers, hyperpigmented and hypopigmented cutaneous lesions, anemia, thrombocytopenia, and constitutional symptoms. Immunological evaluation revealed positive antinuclear antibodies (ANA) with speckled pattern and hypocomplementemia. The diagnosis of SLE was established based on clinical and serological criteria. Early initiation of corticosteroid therapy resulted in marked clinical improvement. This case emphasizes the importance of recognizing early, non organ threatening manifestations of SLE to prevent progression to severe disease.

KEYWORDS

Systemic Lupus Erythematosus, Mucocutaneous Lupus, Cytopenia, ANA, Autoimmune Disease

INTRODUCTION

Systemic lupus erythematosus is a prototypic autoimmune disease characterized by loss of immune tolerance to nuclear antigens, leading to autoantibody production, immune complex deposition, and complement activation. The disease demonstrates a wide spectrum of clinical manifestations ranging from mild mucocutaneous involvement to severe organ threatening complications such as lupus nephritis and neuropsychiatric lupus. Hematological abnormalities, including anemia and thrombocytopenia, are common and often immune mediated. Mucocutaneous manifestations such as oral ulcers and photosensitive rashes frequently represent early disease activity and may precede systemic involvement. Timely recognition of these features is crucial for early diagnosis and initiation of disease modifying therapy.

CLINICAL TIMELINE

Month 0-2: Development of oral ulcers, generalized weakness, low grade fever, and cutaneous lesions Presentation: Evaluation revealed anemia, thrombocytopenia, and elevated LDH Immunological Workup: ANA positive (speckled), low complement levels Diagnosis: Systemic lupus erythematosus established Treatment: Systemic corticosteroids initiated Outcome: Significant improvement in mucocutaneous lesions and systemic symptoms

DIAGNOSTIC FLOWCHART

Clinical Symptoms (oral ulcers, skin lesions, weakness) → Clinical Examination → Detection of Cytopenias → Immunological Testing (ANA, complement) → Confirmation of Autoimmune Etiology → Diagnosis of SLE → Initiation of Therapy

CASE PRESENTATION

A 19 year old female presented with complaints of progressive generalized weakness, intermittent low grade fever, facial puffiness, painful oral ulcerations, and cutaneous lesions over extremities for two months. She also reported anorexia and significant weight loss. There was no history of drug intake, prior autoimmune disease, or similar illness.

CLINICAL EXAMINATION

Physical examination revealed pallor and facial edema. Multiple shallow ulcers were present over the tongue and buccal mucosa. Cutaneous examination showed hyperpigmented plaques, erosions, and healing lesions over the extremities with associated nail changes. Bilateral non tender pedal edema was noted. Systemic examination was unremarkable.

INVESTIGATIONS

Laboratory investigations demonstrated anemia (Hb 8.5 g/dL),

thrombocytopenia (1.2 lakh/cmm), and elevated LDH (880 U/L). Immunological testing revealed positive ANA with speckled pattern, positive ANA profile, elevated CRP, and reduced complement levels, indicating active immune complex mediated disease.

DIAGNOSIS

Based on clinical and immunological findings, a diagnosis of systemic lupus erythematosus with predominant mucocutaneous and hematological involvement was made.

MANAGEMENT

The patient was initiated on systemic corticosteroids along with topical corticosteroids for cutaneous lesions and supportive care. Clinical improvement was observed with resolution of oral ulcers, reduction in skin lesions, and improvement in systemic symptoms.

FIGURES

Figure 1: Facial edema



Figure 2: Oral ulcers**Figure 3: Foot lesions****Figure 4: Lower limb lesions****Figure 5: Hand lesions with nail involvement****DISCUSSION**

This case highlights early SLE presenting predominantly with mucocutaneous and hematological manifestations. Immune mediated cytopenias result from autoantibody mediated destruction, while hypocomplementemia reflects disease activity. Early diagnosis and treatment are essential to prevent progression to severe organ involvement. Current guidelines emphasize early immunosuppression and close monitoring.

CONCLUSION

Young females presenting with mucocutaneous lesions and cytopenias should be evaluated for SLE. Early diagnosis and management significantly improve outcomes.

REFERENCES

1. Tsokos GC. Systemic lupus erythematosus. *N Engl J Med*. 2011;365:2110–21. doi:10.1056/NEJMra1100359
2. Fanouriakis A, et al. *Ann Rheum Dis*. 2019;78:736–45. doi:10.1136/annrheumdis-2019-215089
3. Aringer M, et al. *Ann Rheum Dis*. 2019;78:1151–59. doi:10.1136/annrheumdis-2018-214819
4. Morand EF. *Lancet Rheumatology*. 2023;5:e123–e135. doi:10.1016/S2665-9913(22)00300-5