Unusual Presentation of Lupus Vulgaris on the Face in a Young Female: A Case Report

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Abstract: **Lupus vulgaris is a chronic, progressive form of cutaneous tuberculosis caused by *Mycobacterium tuberculosis*. It typically affects the lower body in endemic areas but rarely involves the face. We report a case of a 22-year-old female presenting with a slowly enlarging plaque on the right cheek for over a year. Clinical and histopathological evaluation confirmed lupus vulgaris. She responded dramatically to standard anti-tubercular therapy. This case highlights the importance of considering tuberculosis in the differential diagnosis of chronic facial plaques, especially in endemic regions.**

Index Terms: **cutaneous tuberculosis, lupus vulgaris, facial lesion, anti-tubercular therapy**

I. INTRODUCTION

Tuberculosis (TB) is an ancient disease with various clinical manifestations. Lupus vulgaris (LV) is a rare cutaneous form of TB, constituting less than 1% of extrapulmonary cases. It usually affects the lower limbs and buttocks; facial involvement is less common, especially in young females. This report presents an unusual presentation of LV on the face, which mimicked other dermatoses, leading to diagnostic delay.

II. CASE PRESENTATION

A. History and Examination

A 22-year-old female presented with a reddish-brown plaque on her right cheek for 13 months. It began as a small papule and progressively enlarged. There was no history of trauma, systemic symptoms, or family history of tuberculosis.

B. Clinical Findings

Examination revealed a well-demarcated, reddish-brown, indurated plaque with surface scaling and mild atrophy. Diascopy showed the classic apple-jelly nodules. No lymphadenopathy or systemic findings were noted.

C. Investigations

- Mantoux test: strongly positive
- Chest X-ray: normal
- ESR: elevated
- Skin biopsy: granulomatous inflammation with Langhans giant cells and caseation
- Ziehl-Neelsen stain: few acid-fast bacilli

D. Diagnosis

Based on clinical and histopathological features, a diagnosis of *Lupus vulgaris* was made.

III. MANAGEMENT AND OUTCOME

The patient was started on standard four-drug anti-tubercular therapy (HRZE) for 2 months followed by HR for 4 months. The lesion began regressing within 4 weeks and showed almost complete resolution at the end of 6 months, leaving mild post-inflammatory hyperpigmentation.

IV. DISCUSSION

Lupus vulgaris typically presents on the lower limbs, making facial lesions atypical and diagnostically challenging. Differential diagnoses include sarcoidosis, leprosy, discoid lupus erythematosus, and deep fungal infections. Histopathology remains essential for confirmation. A high index of suspicion and early biopsy can prevent complications like disfigurement. Prompt treatment ensures excellent prognosis.

V. CONCLUSION

This case underscores the need to consider lupus vulgaris in chronic facial dermatoses in endemic

areas. Early diagnosis and initiation of anti-tubercular therapy can prevent morbidity and scarring.

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