MULTI-CENTRIC LUPUS VULGARIS CO-EXISTING WITH SCROFULODERMA IN AN IMMUNOCOMPETENT PATIENT

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PRESENTATION OF CASE

A 65-year-old female patient presented with a 3-year history of large elevated lesions with pink borders over her bilateral neck associated with pain and purulent discharge. Patient had history of cough with expectoration for past 1 month. No significant history of weight loss. No history of evening rise in temperature. No history of any comorbidities. On examination, she was emaciated. Systemic examination was normal.

Dermatological examination showed scaly reddish-brown papules coalescing to form an irregularly shaped large florid plaque of size 10 cm x 7 cm with erythematous borders, almost encompassing the left supraclavicular fossa and a similar plaque about 5 cm x 3 cm encompassing the right supra-clavicular fossa and a small 3 cm x 3 cm ulcerated plaque with undermined edges and violaceous borders over the enlarged left cervical lymph node.

DIFFERENTIAL DIAGNOSES

- Lupus vulgaris.
- Scrofuloderma.
- Lupoid Leishmaniasis.
- Chromoblastomycosis.
- Sporotrichosis.

CLINICAL DIAGNOSIS

Multicentric lupus vulgaris, coexisting with scrofuloderma.

PATHOLOGICAL DISCUSSION

Histopathology showed epidermis with irregular acanthosis, dermis with epithelioid granulomas with langhans giant cells and granulomas surrounded by lymphocytes admixed with neutrophils, few eosinophils and plasma cells.

Patient's routine investigations were normal. Mantoux test was positive with induration of 12 mm in size. GeneXpert study of the FNAC sample from the cervical lymph node showed positivity to Mycobacterium tuberculosis DNA. Viral serology- HIV, HBV and HCV were non-reactive.

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DISCUSSION OF MANAGEMENT

Patient was started on DOTS (Directly observed treatment, short-course) Category 1 ATT (anti-tuberculosis therapy)-intensive phase with Isoniazid 600 mg, Rifampicin 450 mg, Pyrazinamide 1500 mg and Ethambutol 1200 mg. Response to therapy was noted by marked subjective and clinical improvement within 2 months after initiation of treatment.

FINAL DIAGNOSIS

Multicentric lupus vulgaris coexisting with scrofuloderma in an immunocompetent patient.

DISCUSSION

Cutaneous tuberculosis is caused by Mycobacterium tuberculosis and Mycobacterium bovis.¹ The prevalence among various dermatology outpatient departments in India ranges between 0.1% and 0.5% due to increase in prevalence of HIV and other immunocompromised state.^{2,3} The risk factors of acquiring cutaneous tuberculosis increases with HIV infection, intravenous drug abuse, diabetes mellitus, immunosuppressive therapy, malignancies, end-stage renal disease and infancy.⁴

Cutaneous tuberculosis is classified into tuberculosis due to exogenous source, endogenous source and tuberculids. Infections due to exogenous source include tuberculous chancre and warty tuberculosis. Whereas infections due to endogenous source include scrofuloderma, orificial tuberculosis, miliary tuberculosis, tuberculous gumma and tuberculids which includes lichen scrofulosorum, papular or papulonecrotic tuberculids, erythema nodosum and erythema induratum of Bazin.⁵ Lupus vulgaris is the commonest clinical presentation followed by scrofuloderma. Lupus vulgaris can occur due to both exogenous and endogenous source of infections. It is a paucibacillary type of cutaneous tuberculosis which presents in individuals having moderate-to-high degree of immunity.^{6,7} Common morphologic presentations includes plaque, hypertrophic, atrophic, ulcerative and vegetative patterns. But reports of variants like multicentric lesions, symmetrical and sporotrichoid patterns have also been recorded.⁸ Scrofuloderma is an endogenous form of cutaneous TB that presents in patients with low immunity. It occurs by direct extension to the skin from an underlying infective tuberculous focus such as lymph nodes, bones or joints.^{4,9}

Multicentric forms and co-existence of multiple morphological forms are rarely reported. There have been case reports of patients with coexistence of tuberculosis verrucosa cutis, scrofuloderma and lupus vulgaris, but not many with multicentric lupus vulgaris and scrofuloderma in immunocompetent individuals.⁴ Our patient had no signs of

immunodeficiency, but presented with co-existence of both multibacillary and paucibacillary forms of cutaneous TB. This case is being reported for its rarity.

HISTOPATHOLOGY

Figure 1. Histopathology of the skin showing irregular acanthosis in epidermis and epithelioid granulomas in the dermis

Figure 2. Dermis showing epithelioid granulomas with multiple Langhans type of giant cells

CLINICAL PICTURES ON PRESENTATION

Figure 3

Figure 4

Presence of florid erythematous plaques encompassing the bilateral supraclavicular fossa with an ulcerative plaque with an undermined edge observed over the enlarged left cervical lymph node

CLINICAL PICTURES AFTER INITIATION OF TREATMENT

Figure 5

Figure 6

Marked improvement observed within 2 months after initiation of treatment

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