

## Lupus Vulgaris of the External Nose in a Young Male Child Causing Cosmetic Disfigurement: An Uncommon Presentation

Prasad Poddar Gopal, \*Moin Ahmad Siddiqui

*Department of Dermatology, Era's Lucknow Medical College and Hospital, Lucknow, 226003, India*

### ARTICLE INFO

Type: Case Report

Received: 29/08/2025

Accepted: 30/06/2026

\*Corresponding Author:

E-mail:

[moinahmad12@gmail.com](mailto:moinahmad12@gmail.com)

#### To cite this article:

Gopal PP, Siddiqui MA. Lupus Vulgaris of the External Nose in a Young Male Child Causing Cosmetic Disfigurement: An Uncommon Presentation. Afghan J Infect Dis. 2026, 4(2): 246-249.

DOI:

<https://doi.org/10.60141/ajid.124>

### ABSTRACT

Lupus vulgaris is the most commonly encountered form of cutaneous tuberculosis. It is a chronic and progressive infection typically seen in individuals with moderate immune function. It constitutes approximately 0.1–2% of cutaneous tuberculosis cases in India. In Europe, face is the most usually affected site, but in India, chest, upper back, lower back and buttock are more commonly involved. Lupus vulgaris over face affecting nose, is rarely reported in India. We report here an unusual case of lupus vulgaris affecting the external nose of a young male child causing cosmetic disfigurement.

**Keywords:** Lupus vulgaris, External nose, Cutaneous tuberculosis, Pediatric, Cosmetic disfigurement, Case report

## Introduction

Lupus vulgaris is the most commonly encountered form of cutaneous tuberculosis. It is a chronic, progressive form of disease that typically occurs in individuals with moderate to high immunity. It is acquired either exogenously by direct inoculation of the bacilli or endogenously via haematogenous or lymphatic dissemination from an infected center (1). Lupus vulgaris accounts for nearly 59% of cutaneous

tuberculosis cases reported from India. Although the incidence has declined following the implementation of the National Tuberculosis Elimination Programme (formerly RNTCP), atypical presentations continue to occur and often lead to delayed diagnosis (2). In Europe, the face is the most usually affected site, but in India, chest, upper, lower back and buttock are more commonly involved (3).

Lupus vulgaris over face affecting nose, is rarely reported in India. In this report, we describe a rare presentation of lupus vulgaris involving the external nose in a male child.

### Case report

A 7-year-old male child presented to our outpatient department with a five months history of crusted plaque over the dorsum of nose. Initially it began as an erythematous lesion on the dorsum of external nose, progressed to form an ulcer, eventually formed a crusted plaque over a 5-month period. He received treatment from multiple local practitioners, including various topical applications and systemic drugs. However, there was no improvement in the lesion noticed by the patient. General physical exami-

nation and systemic examination was within normal limits. On local examination there was a crusted plaque over the dorsum of external nose measuring  $5 \times 4$  cm. The plaque was ill-defined, covered with skin-colored to dark-brown adherent crust with multiple linear fissures.

The lesion over the nose extended to the upper lip and did not involve nasal mucosa. The right ala of nose was partially involved while the left nasal ala showed partial tissue destruction resulting in deformity (Figure 1). There was no difficulty in breathing and sense of smell was intact. Surrounding skin was erythematous and thickened with normal sensations. Ear, throat and oral mucosa examination was also normal. There was no cervical lymphadenopathy.



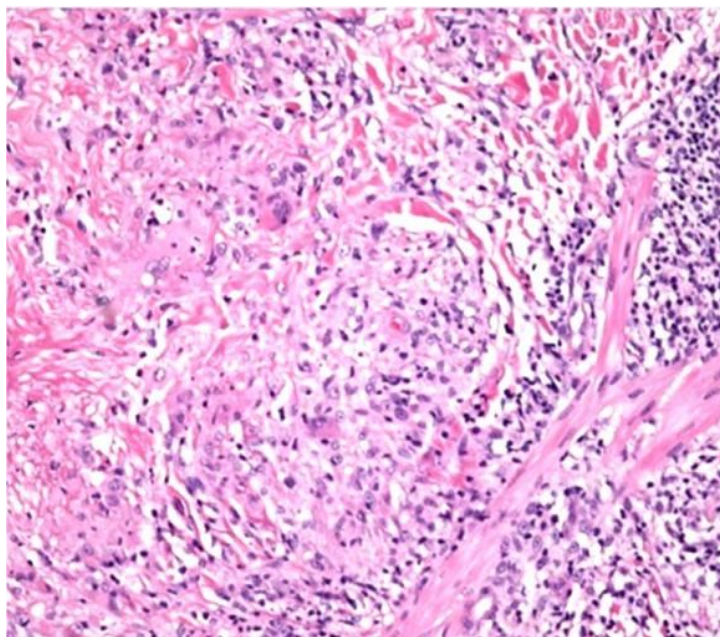
**Figure 1:** Ill-defined crusted plaque present over the dorsum of external nose covered with adherent brown crusts and multiple linear fissures

Anterior nasal endoscopy revealed a mild septal deviation to the left side and a small amount of crusting in both nares which were easily removed.

We considered the possibility of lupus vulgaris, discoid lupus erythematosus, deep fungal infection and malignancy. Routine haematological and bio-chemical investigations were within normal limits. Chest x-ray finding was normal. Two early-morning sputum samples examination for AFB were negative. Test for Antineutrophil cytoplasmic antibodies (ANCA) was also negative. Fungal culture of skin sample was also negative.

After obtaining written informed consent from the patient's parent, clinical photographs were taken and deep skin biopsy of the lesion was performed, the histopathological examination showed epidermal hyperkeratosis and epitheli-

oid cell granulomas with Langhans giant cells and lymphocytic infiltration in the dermis (Figure 2). Acid-fast stain and periodic acid-Schiff stain were all negative. The tuberculin skin test was strongly positive (20 mm). PCR could not be done due to poor financial condition of the patient. Based on the clinical examination and histopathological findings, a diagnosis of lupus vulgaris was made. The patient was started on anti-tubercular therapy consisting of rifampicin (10 mg/kg/d), isoniazid (5 mg/kg/d), pyrazinamide (25 mg/kg/d) and ethambutol (15 mg/kg/d) daily for two months in intensive phase, followed by two drugs rifampicin (10 mg/kg/d), isoniazid (5mg/kg/d) and ethambutol (15 mg/kg/d) for the next 4 months in continuation phase. The patient was lost to follow up due to low socio-economic status, so we could not do the scarring assessment.



**Figure 2:** Histopathological examination showing epithelioid cell granulomas with Langhans giant cells and lymphocytic infiltrate in the dermis (H&E stain, ×40)

## Discussion

Lupus vulgaris is most commonly encountered form of cutaneous tuberculosis. Erasmus Wil-

son initially reported it in 1865, comparing the lesions to ravages of a wolf, thus the name (4). it is a chronic, progressive and tissue destructive form of cutaneous tuberculosis. It usually develops in individuals with moderate or high

immunity. The lesions typically begin as a soft brown-red papule or nodule that gradually grows to form a reddish-brown plaque. This plaque shows “apple-jelly” colour on diascopy. The plaque exhibits involution in one area while expansion in another, as well as sites of atrophic scarring (3).

The infection can be acquired through either exogenous or endogenous means. Exogenous infection occurs from direct inoculation of the bacilli, whereas endogenous infection results from haematogenous or lymphatic dissemination from an underlying center (1). Lupus vulgaris can present with a variety of morphologies including papular, nodular, plaque, ulcerating, mutilating and vegetative forms. The lesions are characterised by peripheral extension, followed by central healing, atrophy and scarring (5). Our case presented with a five-month history of an erythematous lesion over the dorsum of external nose (6), which later enlarged, ulcerated and became an ill-defined crusted and fissured plaque. The clinical examination, histopathological findings and a positive tuberculin skin test helped to reach a diagnosis. The patient was started on anti-tubercular therapy but eventually was lost to follow up.

## Conclusion

It is crucial to identify lupus vulgaris early because lesions particularly those over the face are more likely to heal with scarring, leaving behind a lasting stigma and causing chronic disfigurement. A thorough history, skin biopsy, tuberculin skin test and polymerase chain reac-

tion are required to avoid misdiagnosis or delayed diagnosis. In such circumstances, prompt diagnosis and treatment can spare the patient from extended illness, late treatment, and disfigurement.

## Conflict of Interest

The authors declare no conflict of interests.

## References

1. Couppoussamy KI, Shanmugam S, Devanda R, Murugan R. Lupus vulgaris: a narrative review. *Int J Dermatol*. 2024;63(4), 431–437.
2. Muniyandi M, Rao VG, Bhat J, Yadav R. Performance of Revised National Tuberculosis Control Programme (RNTCP) in tribal areas in India. *Indian J Med Res*. 2015; 141:624-9.
3. Santos JB, Figueiredo AR, Ferraz CE, Oliveira MH, Silva PG, Medeiros VL. Cutaneous tuberculosis: epidemiologic, etiopathogenic and clinical aspects - part I. *An Bras Dermatol*. 2014; 89:219-28.
4. Behera B, Devi B, Patra N. Mutilating lupus vulgaris of face: an uncommon presentation. *Indian J Dermatol Venereol Leprol*. 2010; 76(2), 199–200.
5. Pai VV, Naveen KN, Athanikar SB, Dinesh US, Divyashree A, Gupta G. A clinico-histopathological study of lupus vulgaris: A 3 year experience at a tertiary care centre. *Indian Dermatol Online J*. 2014;5:461-5.
6. Singal A, Arora R, Pandhi D. Lupus vulgaris leading to perforation of nasal septum in a child. *Indian Indian Dermatol Online J*. 2015; 6(3), 196–197.