

An atypical presentation of lupus vulgaris

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A 25-year-old man was referred to the dermatology clinic with a nonhealing ulcer on the front of his right leg, following a localized minor trauma six months earlier. The patient was born in India and moved to Canada in 2012. He had presented to primary care four months after the injury, at which time the ulcer was incised and drained, and treatment was started with oral sulfamethoxazole–trimethoprim and topical mupirocin for a presumed abscess. Initial standard bacterial culture and sensitivity test results were negative. Examination at the dermatology clinic showed a 2.5 x 2 cm violaceous-bordered ulceration (Figure 1). Fungal and mycobacterial cultures were taken to exclude atypical infection. Empirical treatment for pyoderma gangrenosum with topical clobetasol was started. Five weeks later, the culture results returned positive for *Mycobacterium tuberculosis*. Punch biopsy showed necrotizing granulomatous inflammation without acid-fast bacilli, and staining for acid-fast bacilli was negative. Radiographs of the chest and tibia/fibula were negative for tuberculosis (TB), and no other focus was identified; therefore, isolation was not required. The clobetasol treatment was stopped and four-drug antituberculosis therapy started. The ulcer resolved after six months (Figure 2).

Cutaneous TB occurs in 1%–2% of TB cases worldwide. Lupus vulgaris, the most common variant, is chronic and progressive.¹ No source of infection was identified in our patient's case. The infection may have originated through hematogenous spread from an unidentified focus or from re-exposure through exogenous inoculation.²

Pyoderma gangrenosum was initially considered given the clinical features, and this case presentation highlights the importance of excluding other causes of nonhealing ulcers, such as vascular occlusion disorders, vasculitis, malignant disease, cutaneous infection and drug reactions.³ Because most cases of cutaneous TB in Western countries occur on the face, atypical locations may lead to delayed diagnosis and increased morbidity. Complications of untreated cutaneous TB include disease progression, severe disfigurement and squamous cell carcinoma.

References

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Figure 1: Ulceration on the right leg of a 25-year-old man with lupus vulgaris, a common form of cutaneous tuberculosis.



Figure 2: Resolution of the ulcer after six months of four-drug antituberculosis therapy.

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