

## A 40-Year-old Man With Tongue Lesions

(See page 1231 for the Photo Quiz.)



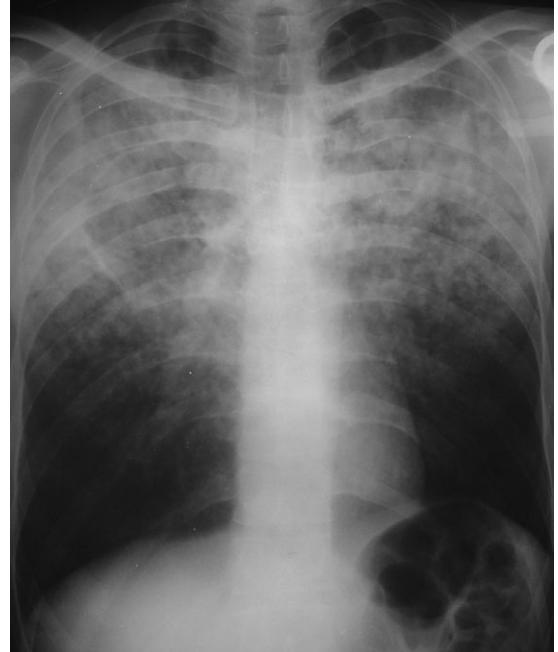
**Figure 1.** Nodular tongue lesions with areas of ulceration consistent with necrotizing granulomas in a tongue punch biopsy.

Diagnosis: lingual and pulmonary tuberculosis (TB).

TB of the tongue, or lingual TB, is an uncommon presentation of *Mycobacterium tuberculosis* infection, with an incidence of ~0.2% [1, 2]. Lingual TB can either be the primary manifestation of TB (primary lingual TB; 42% of cases) or can present in conjunction with pulmonary (54%) or extrapulmonary TB (4%) [3]. Repeated exposure to sputum with high bacillary counts, direct inoculation of lingual tissue, or direct spread from the larynx have been described as possible routes of infection [4, 5].

All parts of the oral cavity, including the palate, uvula, buccal mucosa, gingiva, and tongue, as well as bony structures, such as the maxilla and mandible, can be infected with *M. tuberculosis* [3]. However, the tongue is the most common site of TB infection among the soft-tissue structures of the oral cavity [6, 7].

Diagnosis of primary lingual TB is very difficult. Ulcers can be misdiagnosed as neoplasms, although concomitant carcinoma and TB has been reported [3]. Other differential diagnoses include traumatic ulcers, aphthous ulcers, actinomycosis, histoplasmosis, syphilitic ulcer, and Wegener's granuloma [8–10]. The diagnosis



**Figure 2.** Chest radiograph showing diffuse bilateral miliary pattern particularly in upper lobes consistent with pulmonary tuberculosis.

of TB in the oral cavity cannot be established clinically because of its similarity with multiple other etiologies, and histopathological analysis is essential to confirm the diagnosis [11].

This patient's tongue lesion was initially diagnosed as pemphigus, and he had been treated with corticosteroid and immunosuppressive agents without any further workup. Upon presentation to our center, a tongue punch biopsy was performed that demonstrated necrotizing granulomas. A sputum culture was positive for an *M. tuberculosis* strain that was sensitive to all first-line anti-TB medications. After 6 months of treatment for TB, all tongue and pulmonary lesions improved significantly, and the patient is now asymptomatic. TB must be considered as a possible cause of chronic oral lesions, particularly in areas in which the disease is endemic.

## Acknowledgments

*Potential conflicts of interest.* All authors: no conflicts.

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**Clinical Infectious Diseases** 2011;52(10):1276–1277

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1058-4838/2011/5210-0011\$14.00  
DOI: 10.1093/cid/cir159