

Pruritic and Painful Nodules on the Tongue

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An 82-year-old woman with atrial fibrillation and chronic obstructive pulmonary disease presented with pruritic and painful lesions on the tongue of 10 years' duration. She had not undergone treatment with systemic or inhaled corticosteroids during the course of the pulmonary disease. On physical examination, several fleshy and well-defined erythematous papules speckled with whitish areas were observed on the dorsal aspect and anterior border of the tongue. Superficial whitish areas could not be removed by scraping.

What's the diagnosis?

- a. chronic hyperplastic candidiasis (nodular form)
- b. epidermoid carcinoma
- c. granular cell tumor (Abrikossoff tumor)
- d. human papillomavirus infection
- e. oral submucous fibrosis

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The authors report no conflict of interest.

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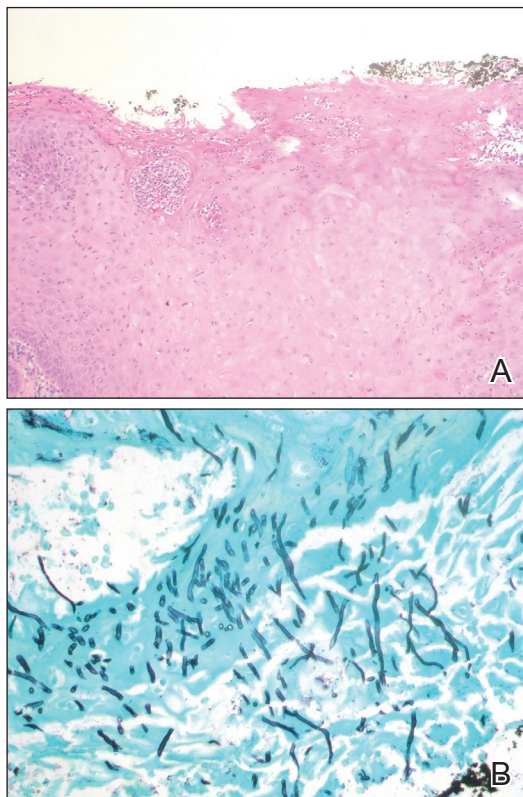
The Diagnosis: Chronic Hyperplastic Candidiasis (Nodular Form)

Chronic hyperplastic candidiasis (CHC) is a rare form of oropharyngeal candidiasis. The most frequent clinical presentation is a white plaque that cannot be detached (also known as candidal leukoplakia). It usually involves the anterior buccal mucosa, mainly the commissural area, though the palate and tongue also can be affected. The nodular type of CHC is even less common. Our patient exhibited the typical clinical presentation of the nodular type of CHC.¹⁻³ The differential diagnosis includes leukoplakia, premalignant and

malignant epithelial lesions, granular cell tumor, and florid oral papillomatosis.^{1,3} A biopsy usually is required for diagnostic confirmation. Histologically, CHC is characterized by parakeratosis and a hyperplastic epithelium invaded by *Candida* hyphae.⁴ Because *Candida* species are commensal in up to 50% of the healthy population, superficial colonization of tissues is not enough to indicate notable disease.¹ In our patient, the histopathology revealed a hyperplastic mucosa without atypia and numerous hyphae (Figure). Both lingual swab and tissue cultures revealed high growth of *Candida albicans*.

Infection by *C. albicans* depends on pathogen virulence and host factors such as wearing dentures, reduced salivary production, smoking habit, or immunosuppression.^{1,4} Apart from wearing dentures, our patient did not present with other predisposing factors. It is possible that the immunosuppressive status related to old age and associated oral changes contributed to *Candida* infection in this case.

Topical or systemic antifungal agents together with the elimination of predisposing factors are usual first-line treatments. Because of the relationship with atypia and the possibility of evolving into carcinoma in untreated or persistent lesions, follow-up is necessary to verify complete resolution after treatment.^{1,3,4} In the case reported herein, the lesions disappeared after 15 days of oral fluconazole treatment.



Histopathology revealed hyperplastic and parakeratotic epithelium, microabscesses of neutrophils, and high colonization of *Candida* hyphae (A)(H&E, original magnification $\times 100$). Numerous *Candida* hyphae were observed (B)(Grocott methenamine-silver, original magnification $\times 400$).

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