

## THE CLINICAL PICTURE

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# Palatal mass with an overlying white lesion

**A** 55-YEAR-OLD WOMAN presented with a mass and a white lesion on her hard palate. She said that the mass had been present for 15 years. She did not have any symptoms related to the mass, except for experiencing occasional food entrapment in the neck of the mass. She had a history of type 2 diabetes mellitus and no history of smoking or alcohol consumption.

Examination revealed a painless, firm mass on the hard palate with a nonscrapable white lesion on the overlying mucosa of the mass (**Figure 1**). Computed tomography did not show any notable abnormalities.

Based on these findings, a clinical diagnosis of torus palatinus with leukoplakia was made. Because an excisional biopsy of the leukoplakia was considered necessary, en bloc removal of the lesion and the torus palatinus was recommended. The patient declined the procedure, so we monitored her closely for 7 years. The leukoplakia disappeared over time, but the mass remained unchanged throughout the follow-up period. The leukoplakia was likely a reversible frictional keratosis.

### ■ TORUS PALATINUS

Torus palatinus presents as a median, symmetrical bony protuberance along the midline ridge of the hard palate. It is typically asymptomatic, often goes unnoticed, and is usually discovered by the patient or incidentally during routine dental examination.<sup>1</sup>

Torus palatinus is present in up to 25% of the general population and is more common in women.<sup>1,2</sup> It has a higher prevalence in East Asian populations than in West African populations; individuals between 20 and 50 years of age are most commonly affected.<sup>3</sup> A study that included 448 women from different ethnic groups living in the United States found torus palatinus was present in 25.6% (11 of 43) of Hispanic participants,

doi:10.3949/ccjm.93a.25050



**Figure 1.** The patient had a painless, firm mass on the hard palate and a white lesion attached to the overlying mucosa of the mass.

22.5% (68 of 302) of Black participants, 16.7% (6 of 36) of Asian participants, 16.1% (10 of 62) of White participants, and 0% (0 of 5) of Native American participants.<sup>4</sup> A study conducted in Malaysia reported a torus palatinus prevalence of 32.9% in Malaysian women.<sup>5</sup>

About 30% of palatal tori are hereditary, while the remaining 70% are thought to result from environmental factors such as masticatory hyperfunction (excessive chewing) and parafunctional habits such as bruxism and jaw clenching.<sup>1,3</sup>

Torus palatinus should be differentiated from other intraoral lesions, including fibromas, mucoceles, osteomas, osteochondromas, osteoid osteomas, and, most important, malignant tumors such as squamous cell carcinoma and chondrosarcoma (**Table 1**).<sup>1,2</sup> The diagnosis of torus palatinus is primarily clinical, but radiographic and pathologic examinations may occasionally be helpful.<sup>1</sup>

**TABLE 1**  
**Differentiating torus palatinus and malignant lesions of the hard palate**

Characteristics	Torus palatinus	Malignant lesions of the hard palate
Surface	Smooth	Irregular
Palpation	Bony, hard	Soft
Morphology	Symmetrical	Asymmetrical
Growth	Minimal, slow	Rapid
Onset	Gradual	Acute, sudden

Treatment is generally not required for asymptomatic patients<sup>3</sup>; however, surgical removal may be considered when there are concerns related to trauma, hygiene, psychological distress, or functional impairment.<sup>1</sup> The mucosa covering palatal tori is often thin and prone to trauma, which may lead to ulceration or inflammation.<sup>1</sup> Additionally, white, nonscrapable lesions such as frictional keratosis, lichen planus, or leukoplakia can develop on the surface.<sup>6</sup> These lesions are commonly encountered by dental surgeons, dermatologists, and otolaryngologists; they require careful monitoring because of the potential for malignant transformation into, for example, squamous cell carcinoma.<sup>2,6</sup> ■

## DISCLOSURES

The author reports no relevant financial relationships which, in the context of their contribution, could be perceived as a potential conflict of interest.

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