

# Small White Spots on the Lips

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A 27-year-old woman presented with multiple small white spots on the upper lip of several years' duration. The lesions were slightly raised, nonpainful, nonpruritic, and nonpurulent. She had a history of tinea versicolor, acne vulgaris, and seborrheic dermatitis, with no history of tobacco use and no family history of skin disease. On physical examination, she was afebrile and appeared healthy. More than 10 pale yellow, 1- to 2-mm papules were present on the upper lip.

## WHAT'S THE DIAGNOSIS?

- Fordyce granules
- granular cell tumors
- herpes simplex virus type 1
- mucoceles
- oral leukoplakia

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The authors report no conflict of interest.

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## THE DIAGNOSIS:

## Fordyce Granules

Fordyce granules are prevalent benign anatomic variations that occur in approximately 80% of the population.<sup>1</sup> The spots usually present as multiple (usually >10) 1- to 2-mm, painless, yellow-white papules in a symmetric bilateral distribution. They are normal superficial sebaceous glands seen on mucosal surfaces including the oral mucosa, lips, and genitalia. The papules are asymptomatic, and patients often are unaware of their presence. They can appear at any age and can last for months to years. No treatment is indicated, and patients need only reassurance.<sup>1</sup>

There are several differential diagnoses.<sup>2</sup> Granular cell tumors present as solitary, yellowish or pink, slightly indurated, nonmobile, firm masses that usually measure less than 2 cm in diameter and can be associated with local paresthesia. The oral cavity is the second most common site after the skin and usually involves the dorsum of the tongue; however, granular cell tumors also may develop in the substance of the buccal mucosa, lips, or floor of the mouth. On histopathology, the neoplasm is composed of cells with granular cytoplasm that is of neural origin. Granular cell tumors are slow growing and may be present for months. The mean age of onset is in the fourth decade, and females are more likely to be affected. Excisional biopsy is diagnostic and curative.<sup>2</sup>

Mucoceles of the mouth are solitary, bluish clear, fluctuant, dome-shaped, well-demarcated nodules that usually appear on the lower lip.<sup>3</sup> They are caused by rupture of a salivary gland duct due to minor trauma. Mucin is excreted into the surrounding soft tissues, leading to abrupt nontender swelling over the next several weeks. If they originate deeper within the lip they may appear normal in color. Most range from 1 to 2 mm in diameter but can grow to up to several centimeters in size. Other affected sites may include the ventral tongue, posterior buccal mucosa, or soft palate. Excisional biopsy and conservative surgical excision are recommended for diagnosis and management, respectively.<sup>3</sup>

Oral leukoplakia is a sharply demarcated, white, mucosal plaque that represents either epithelial dysplasia, carcinoma in situ, invasive carcinoma, or hyperkeratosis

of unknown etiology. It is a clinical diagnosis of exclusion. The patient may present with a hoarse voice and history of tobacco use. The risk for malignant transformation to squamous cell carcinoma varies from 0% to 20% over the course of 30 years.<sup>4</sup> The lesions occur on any mucosal surface, cannot be rubbed off, and usually are asymptomatic.<sup>5</sup> The ventral tongue, floor of the mouth, and soft palate are associated with epithelial dysplasia and invasive carcinoma more often than other mucosal sites. There are 2 main types of leukoplakia: localized (unilateral plaque) and proliferative. Because of the risk for cancer, biopsy always is indicated and should be taken from different areas of the lesion (ie, red, verrucous, or nodular areas) if the lesion is nonhomogeneous. Treatment involves excision in the setting of dysplasia or invasive carcinoma. Photodynamic therapy has been shown to reduce the size of oral leukoplakia lesions and is being studied as an alternative therapy.<sup>5</sup>

Herpes simplex virus type 1 is a common infection of the oral mucosa that classically causes multiple vesicular lesions with an inflammatory erythematous base.<sup>6</sup> The lesions are painful and may last for 10 to 14 days. Patients also may develop systemic symptoms such as fever and malaise. Once primary infection with herpes simplex virus has occurred, the virus lives in a latent state in ganglion neurons and can reactivate.<sup>6</sup>

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