

> **THE PATIENT**  
56-year-old white man

> **SIGNS & SYMPTOMS**

- Red and white intraoral lesion
- History of liver cirrhosis
- History of smoking and alcohol misuse

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*The authors reported no potential conflict of interest relevant to this article.*

## > **THE CASE**

A 56-year-old white man presented at our dental clinic for routine care. The intraoral examination revealed an asymptomatic red lesion with white vesicle-like areas on the right side of the soft palate (**FIGURE**). The extraoral examination was normal, and regional lymph nodes were nonpalpable. The patient's medical history included liver cirrhosis and pancreatitis. He also had a 30-year history of alcohol misuse (1-5 drinks per day) and a 30-pack-year smoking history. (The patient had stopped drinking at the time of presentation, and had quit smoking 2 years earlier.) We instructed him to gargle with warm salt water at home and return in 2 weeks. At follow-up, the lesion was unresolved, so a biopsy was performed.

## **THE DIAGNOSIS**

The clinical diagnosis was erythroplakia. Trauma from food burn and inflammation of the salivary gland were both considered, but ultimately ruled out due to lack of symptoms and persistence of the lesion after 14 days. The pathology report confirmed a diagnosis of squamous cell carcinoma (SCC) in situ. Based on the pathology report, we referred the patient to an oral surgeon for wide surgical excision with evaluation of the margins.

Because of its location and subtle presentation, the lesion could have been easily overlooked, underscoring the importance of routinely going beyond dentition to examine the soft tissues of the mouth.

**FIGURE**

**Red and white lesion in the region of the soft palate**

## **DISCUSSION**

SCC is the most common cancer found in the oral cavity, accounting for 90% of all oral malignancies.<sup>1,2</sup> Other malignancies include lymphomas, sarcomas, melanomas, salivary gland neoplasms, and metastasis from other sites.<sup>3,4</sup> Predisposing factors include tobacco use (namely inhaled methods and



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chewing tobacco), alcohol misuse, human papillomavirus infection, and chewing betel nut.<sup>1,5</sup> (Betel nuts grow on a species of palm tree mainly found in India, Pakistan, and Bangladesh. They are commonly chewed for their caffeine-like effect and are known to be carcinogenic.)

■ **Presentation.** SCC of the oral cavity can have various presentations. The lesion can appear as white, red, a mix of white and red, as a mass, or as a nonhealing ulcer. While some patients may be asymptomatic (as was ours), some may have signs and symptoms such as pain, bleeding, difficulty swallowing, difficulty wearing dentures, or a neck mass.<sup>6</sup> A history of smoking and alcohol misuse, which was present in this case, should heighten suspicion and prompt further investigation of oral lesions.

■ **Location.** The most common intraoral site for oral cancer is the tongue (on the posterolateral border) followed by the floor of the mouth. Other common sites in descending order are the soft palate, gingiva, buccal mucosa, labial mucosa, and hard palate.<sup>1</sup> (Our patient's lesion was on the border of the hard and soft palate).

■ **Treatment** of oral cancer is surgical. In some cases, depending on the stage and size of the tumor, radiation and chemotherapy may be considered.<sup>3,5</sup> Approximately two-thirds of oral cancers are detected in the later stages.<sup>7</sup> The 5-year survival rate for people with oral SCC found at stages III or IV ranges from 32% to 45%, while the rate for those with SCC detected at stages I or II is 58% to 72%.<sup>1</sup> Patients with a history of oral cancer have a 20-fold increased risk of a recurrence in the oral cavity or of developing cancer in the surrounding areas, such as the larynx, esophagus, and lungs, underscoring the necessity of adequate follow-up in these patients.<sup>2,3,5</sup>

### Who is at risk?

In 2015, there were an estimated 45,780 new cases of oral cavity and pharyngeal cancer and 8650 deaths from these causes.<sup>8</sup> Although oral cancer accounts for only 3% of all cancers in the United States, it is the eighth most common cancer in males and the 15<sup>th</sup> most common in females.<sup>1</sup> Prevalence differs

tremendously by location, however. In India, for example, oral cancer accounts for 30% of all cancers.<sup>9</sup> Regardless of location, incidence increases with age; 62 is the average age at diagnosis.<sup>2</sup> Oral cancers are also more common among African Americans than among Caucasians.<sup>1,3,5</sup>

■ **Smokers are 2 to 3 times more likely** to develop oral cancer than nonsmokers.<sup>1</sup> This risk increases with amount and duration of smoking.<sup>1</sup> The combination of smoking and alcohol use has a synergistic effect, increasing the likelihood of developing oral cancer 15 fold.<sup>1,3</sup>

■ **Alcohol use.** Among male patients with oral cancer, one-third are heavy alcohol users.<sup>1</sup> In fact, one study found that 20% of these patients have cirrhosis of the liver.<sup>1</sup> Thus, it makes good clinical sense to routinely examine the soft tissue of the oral cavity for abnormalities in patients with alcohol-induced cirrhosis of the liver.

■ **Our patient.** We placed our patient on a 3-month recall and stressed the importance of not smoking. The patient had surgery and a good outcome was documented. The patient indicated at follow-up that he'd started drinking again and was referred for counseling.

### TAKEAWAY

It's important to pay attention to color differences in the oral cavity on routine visits, particularly in patients with known risk factors for SCC. Patients with a lesion in the oral cavity should be seen again within 2 weeks. If the lesion is unresolved, the patient should be referred for further examination and/or biopsy. The possibility of recurrent oral cancer or cancer in the surrounding areas makes these patients good candidates for frequent follow-up examinations.

We strongly suggest that primary care physicians encourage their patients with the known predisposing risk factors of tobacco use and chronic alcohol misuse to quit these habits, visit their dentists for annual oral cancer screenings, and report any oral symptoms promptly to their medical and/or dental care providers. The asymptomatic nature of many of these lesions underscores



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the importance of following this advice. As is the case with most other cancers, survival rate is dependent on the stage of the disease at diagnosis. **JFP**

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