

The “Point of Care” section answers everyday clinical questions by providing practical information that aims to be useful at the point of patient care. The responses reflect the opinions of the contributors and do not purport to set forth standards of care or clinical practice guidelines. Readers are encouraged to do more reading on the topics covered. If you would like to contribute to this section, please contact editor-in-chief Dr. John O’Keefe at [jokeefe@cda-adc.ca](mailto:jokeefe@cda-adc.ca).

## QUESTION 1

### Why should dentists screen for oral cancer?

Regular dental visits are associated with diagnoses of oral cancer at an earlier stage. Some 20 years ago, a British Columbia study<sup>1</sup> of people with oral cancer found that 70% of those who had regular dental visits were diagnosed at an early stage (stage I or II cancers), while only 40% of those who did not have regular dental visits had early oral cancer on diagnosis. Treatment of oral cancer at an earlier stage is less complicated and is associated with higher survival rates. In addition, the cost of treatment for a stage IV oral cancer patient is more than 3 times the cost of treatment for a stage I patient.<sup>2</sup> Hence, oral cancer screening by dentists may both improve prognosis and reduce the costs associated with this disease.

Many dentists already routinely perform clinical examinations for oral cancer during regular recall visits. An assessment of the costs and outcomes of oral cancer screening programs in the United Kingdom showed that screening by dentists may be less costly than screening by medical practitioners.<sup>3</sup> This economic study focused on clinical

examinations as the sole screening technique, but considered scenarios involving no screening, invitational screening and opportunistic screening, by either a dentist or medical practitioner and for either targeted high-risk groups or for the general population. Opportunistic screening refers to a visual oral cancer examination during a patient’s visit to a dentist or doctor for another purpose. The authors found that the best option, in economic terms, was opportunistic screening of high-risk people by dentists.

### Deciding Who Should Be Screened

Which patients should be screened and how often are key issues in setting oral cancer screening guidelines. The choices will affect both the costs and benefits of any program. Thus, oral cancer screening guidelines may define thresholds for age, relevant risk factors and optimal screening frequency. Each of these choices has a range of potential cost implications and other benefits and drawbacks, as outlined in **Table 1**. The choices are

**Table 1** Rationale behind various oral cancer screening strategies

Strategy	Arguments for strategy	Arguments against strategy
<b>Age</b> Target older people (e.g., those ≥ 40 years), as opposed to all adults	<ul style="list-style-type: none"> <li>Incidence at age 40 is 10–20 times that at age 20<sup>4</sup></li> <li>Number of screening examinations to detect 1 case will be lower in older people</li> </ul>	<ul style="list-style-type: none"> <li>Not screening younger adults means cases of oral cancer in this group may go undetected until late stages</li> <li>Mortality in younger patients means more years of life lost</li> </ul>
<b>Behaviour</b> Target those with behavioural risk factors (e.g., smoking, alcohol), as opposed to everyone	<ul style="list-style-type: none"> <li>Smoking and alcohol consumption are both associated with increased incidence of oral cancer<sup>5</sup></li> <li>75% of oral cancer patients report having these habits<sup>4</sup></li> </ul>	<ul style="list-style-type: none"> <li>25% of oral cancer patients have no known risk factors<sup>4</sup></li> <li>Many identifiable risk factors, such as human papillomavirus, may still be untargeted</li> </ul>
<b>Frequency</b> Perform screening at every annual recall visit (as opposed to every 2 years)	<ul style="list-style-type: none"> <li>Potential to detect oral cancer at earlier stages is higher with more frequent examinations</li> </ul>	<ul style="list-style-type: none"> <li>The additional benefits of more frequent screening may not offset the higher costs</li> </ul>

also interrelated. For example, if a narrower age range is chosen, the resources conserved might be applied to shortening the interval between screenings. The current guidelines<sup>6</sup> for annual screening of all patients from age 40 reflect consensus on these issues, which may change with more information in the future. All these screening options apply only to people who come for dental care; resources will also be needed for outreach programs for people who do not have regular dental care.

### The Impact of Adjunctive Technologies

The application of adjunctive technologies is likely to have a major impact on screening activities and influence both the cost and outcomes associated with oral cancer screening. Methods such as toluidine blue staining and fluorescence visualization may improve the benefits of screening in terms of survival rates and reduced treatment costs, but the extent of the improvement, how it compares with the increased costs of screening and other effects, such as the frequency of false positive tests, need to be considered. Of note, the added value of these technologies is still unknown and is likely to depend on supporting education initiatives. Further evaluation in the community setting is a high priority. ♦

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## QUESTION 2

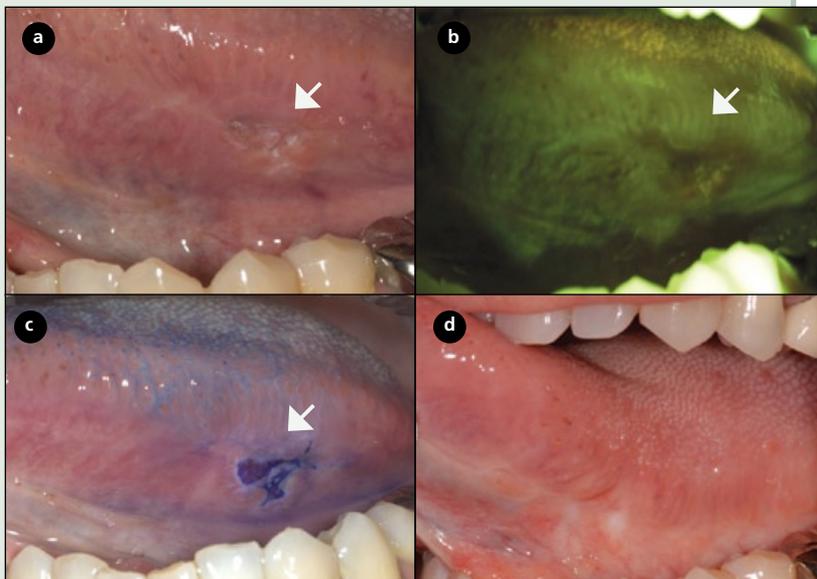
## Can oral cancer occur in someone without known risk?

A 39-year-old woman presented with recurrent episodes of severe jaw pain and mild to moderate tongue soreness. These symptoms prompted investigations by her family dentist and doctor. Unable to provide adequate explanation, they referred her to a dermatologist because they had noted a white patch in the painful region of the tongue. The clinical impression was that the lesion was traumatic in origin and likely related to a lingually tilted tooth 37. Reassurance was offered. No further assessment or monitoring was recommended and the patient was discharged from care.

About 3 months later, the patient reported the onset of intense pain in the left mandible and submandibular area. She again visited her family dentist who was able to exclude dental pathology as an explanation for her pain. Despite ongoing complaints of pain, particularly in association with speech and eating, no temporomandibular disorder could be identified. The persistence of a supposedly “traumatic” lesion on the left lateral tongue was of concern and a diagnostic biopsy was performed. The biopsy showed mild to moderate epithelial

dysplasia. Referral to a dysplasia clinic affiliated with the BC Oral Cancer Prevention Program/BC Cancer Agency was, therefore, arranged.

The patient’s initial visit to the dysplasia clinic took place 6 weeks following the initial biopsy. She was complaining of increasing pain focal to the left submandibular and jaw joint area. Her pain was significant enough to impair oral function and disrupt sleep. Clinical examination revealed a biopsy site that had not healed and a small (< 1 cm) ulcerated white lesion on the left ventral tongue (Figs. 1a–1c). Because of the patient’s increasing pain and the failure of timely healing at the initial biopsy site, a second biopsy was scheduled. Surprisingly, the comparative biopsy showed an invasive squamous cell carcinoma at the left lateral tongue. This locally invasive lesion had not spread to lymph nodes in the region nor had distant metastasis occurred. It was surgically resected and postsurgical recovery was uneventful. At the 3-year follow-up (Fig. 1d), the patient was pain free, had resumed normal oral function and was without any clinical evidence of disease recurrence.



**Figure 1:** A small ulcerated white lesion on the left ventral tongue of a 39-year-old woman with no history of tobacco or alcohol use. (a) Lesion (arrow) viewed with conventional white light. (b) Lesion viewed with direct fluorescence visualization showing loss of fluorescence (arrow). (c) Lesion viewed following application of toluidine blue showing a focal region of dye uptake (arrow). (d) Clinically unremarkable scar on left tongue 3 years after surgical intervention.

### A Young Person Who Does Not Smoke or Drink Can Get Oral Cancer

The vast majority of oral cancers develop in the fifth or sixth decade of life, usually in those who have significant and longstanding smoking habits or alcohol use. In our longitudinal study (data not yet published), we have observed a significant number of circumstances, similar to those described here, where oral cancer has been diagnosed in the absence of conventional risk factors. For example, of the patients we followed, 18.5% were between the ages of 40 and 45 years, and 9% were under age 40 when diagnosed with oral cancer. Many had never consumed alcohol; 31% of all study participants had never used tobacco products. The youngest person to be diagnosed with oral cancer was 18 years old. Young age and the absence of conventional risk factors often results in a delay in diagnosis.<sup>1,2</sup> Further details on the risk factors for oral cancer are reviewed in this issue.<sup>3</sup>

### Pain and Nonhealing May Be the Warning Signs for Oral Cancer

A recent pilot study conducted as part of our longitudinal study (data not published) on patients' experience from detection to diagnosis of a high-grade oral lesion has shown that 57% (12/21) first identified the oral lesion themselves. In this group, pain was the most common (11/12, 92%) initial complaint followed by a change in tissue colour (4/12, 33%) and lumps or bumps (3/12, 25%). Surprisingly, two-thirds of the patients (8/12) were not concerned about initial oral symptoms, largely due to limited awareness of oral cancer. Similar results have been observed in other studies.<sup>4,5</sup> Of interest, among lesions initially identified by health professionals (i.e., through screening), all of the high-grade lesions were asymptomatic. This further highlights the importance of regular screening for oral cancer.

### A Small, Painless and Difficult To Identify Oral Lesion May Be Malignant

Oral cancer is not always large. The size of a lesion has been cited as an independent risk factor for the malignant transformation of premalignant oral lesions.<sup>6</sup> However, an invasive oral cancer can be small, as in the case described.

As a "rule of thumb," if a suspicious mucosal lesion persists for more than 3 weeks following removal of identified local irritants, such as trauma, infection or inflammation, diagnostic biopsy is

recommended. This case draws attention to demographic outliers and atypical cases. Your careful attention may save a life! ♦

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## QUESTION 3

## Is the message clear? Talking with your patient about oral cancer screening.

Communicating effectively with our patients about the potential benefits of oral cancer screening and the risk factors for developing the disease can be challenging. However, as clinicians, we are obligated to ensure that patients receive and understand this information to enable them in the health care decision-making process. In the literature, the term “health literacy” is used to refer to the link between the level of patient knowledge and awareness and the ability to act on health information.

Communicating with patients is complicated by the fact that clinicians and patients have different vocabularies. In addition, poor health literacy is common among those with a low level of education, immigrants, the elderly and ethnic minorities.<sup>1</sup> The problem is further complicated by the fact that 48% of Canadian adults over the age of 16 years have only basic general literacy skills.<sup>2</sup> This means that they have difficulty reading, understanding and dealing with everyday printed material unless it is simple and clearly laid out. This significantly affects the patient’s ability to obtain, process and understand the basic health information needed to make appropriate health care decisions.<sup>3</sup>

Insufficient health literacy is a key factor affecting clinician–patient communication.<sup>4</sup> Consequently, it may adversely affect cancer incidence, mortality and quality of life and has been shown to be a potential indicator of increased cancer risk and poor participation in cancer control programs.<sup>5,6</sup> In other words, ineffective communication related to oral cancer screening may result in diagnosis at a late stage. Once diagnosed, treatment options may not be well understood, thereby compromising patient acceptance of and compliance with recommended care. The following illustrates a step-by-step approach highlighting the key points and techniques for clinicians to improve their communication with patients, with emphasis on oral cancer screening.

### Practical Points for Improving Patient Communication

#### Patient Background Review

- Look for clues from the patient that indicate inadequate understanding, such as filling out a health history incompletely and inaccurately, using words incorrectly or asking for instructions to be repeated.
- Identify patients with low health literacy and provide them with information specifically adapted to their needs using clear, plain verbal and written communication.
- Be aware of potential communication barriers caused by cultural differences, disabilities, differences in attitudes and beliefs, lack of trust and hearing impairment.

#### During Conversation

- Imagine yourself as the patient as you give advice and assume that your patient will not understand or integrate most of what is said.
- Find out what the patient already knows. Build on that existing knowledge and fill in the gaps. For example, start by asking the patient, “Have you ever heard about mouth cancer” and “what do you know about it?”
- Speak in concrete, simple language that patients can understand avoiding the use of medical terms such as *biopsy* or *lesion*.
- Focus on the key information. Use short sentences. Repeat information if necessary.

### Common questions related to oral cancer screening

#### Do I really need mouth cancer screening?

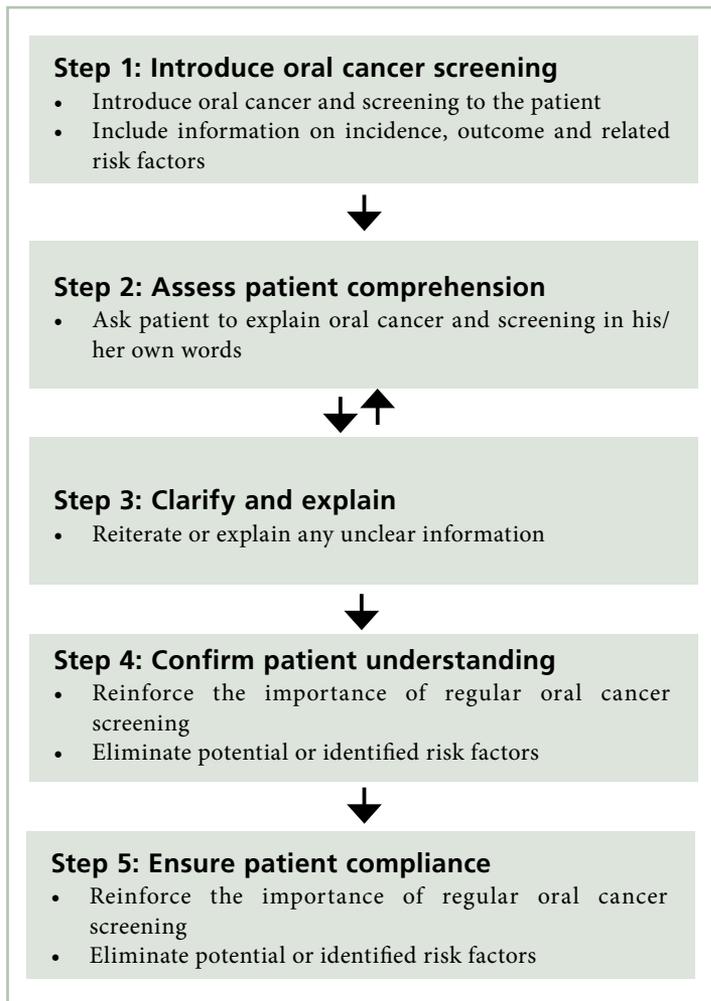
“Cancer can occur in the mouth. Through regular screening we are able to find mouth cancer in the early stages when it is easiest to treat.”

#### Do you think I’ve got cancer? Should I be worried?

“Most mouth cancers are not uncomfortable or painful. The screening exam is to check your mouth to see if there are any abnormalities that need to be followed up. This does not mean you have mouth cancer.”

#### How can I prevent mouth cancer?

“Most mouth cancers can be prevented by not smoking or chewing tobacco and by reducing the amount of alcohol you drink. A regular check of the mouth is a way to find abnormal change early, if there is any.”



**Figure 1:** Proposed stepwise “teach-back” method in patient communication on oral cancer screening.

- Maintain eye contact when speaking with your patient to create a sense of personal connection. Be respectful, caring and sensitive.
- Offer alternative materials to convey information. In addition to printed material, drawing pictures or using videos may enhance patient understanding.
- Use the “teach-back” method to confirm patient understanding of information (**Fig. 1**). This is an effective way to ensure that patients understand what you have told them. It involves asking patients to explain or demonstrate the health-related information that has been introduced.<sup>7</sup> Using this technique, the clinician assumes responsibility for adequate and effective patient teaching and communication. If the patient cannot explain or demonstrate learning,

the clinician must assume that he or she did not provide an adequate or clear explanation and must, therefore, take additional or repeated steps to ensure that the patient understands what he or she needs to know.

There is clearly a need to raise public awareness about oral cancer screening, oral cancer and the risk factors for this devastating disease. To improve oral health outcomes, acknowledging and addressing the issues of patient literacy and health literacy are key. ✦

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## QUESTION 4

## What do I say to my patient who needs a biopsy?

When a clinician finds an oral lesion that raises suspicion of premalignancy or early malignancy, a biopsy is needed. It is important to prepare the patient for the biopsy procedure and alleviate his or her concerns. This should be done in a way that will prevent unnecessary anxiety yet inform the patient of the importance of the test and the value of complying with your recommendation.

**Preparing Your Patient for Biopsy**

The mere suggestion of biopsy can create immense anxiety for patients. In their mind, the word “biopsy” is often immediately linked to cancer, so it is important to remind them that it is the only way to arrive at a definitive diagnosis for many conditions affecting oral tissues.

Properly prefaced, the need for a biopsy will usually be well understood and accepted by the patient. Adult patients often relate the procedure to the need for their physician or dermatologist to check skin moles.

Once the decision to biopsy has been made, it is important to inform your patient of your reasons for recommending the procedure and what it entails. For example, “Many conditions that occur in the mouth can look very similar. I think it is important to take a very small piece of tissue, a biopsy, and look at it under the microscope. This way we will know exactly what it is and how to treat it.”

When talking with a patient, there are no hard and fast rules. Frequently common sense plays an important role. For a patient who is highly

**Explaining the diagnosis to your patient**

Here is an example of what can be said to a patient with low-grade (mild or moderate) dysplasia.

“Your biopsy showed low-grade dysplasia. Dysplasia is a term used by the pathologist to describe changes to the cells in the tissue sample. Because some dysplasias can progress to cancer, we monitor them closely. Dysplasias are referred to as mild, moderate or severe depending on the amount of change in your tissue. At this point, the change seen in your biopsy was minimal (moderate). It was found early. It is important to know that most mild or moderate dysplasias will not become cancer. However, because there is a small risk and we have no way of telling which mild (moderate) dysplasia will become cancer, we are recommending regular follow-up and have arranged this for you.” (Give details.)

In British Columbia, the recommendation is that all high-grade dysplasia (severe or carcinoma in situ) be treated; thus, the dialogue will be somewhat similar to that used for cancers. Here is an example of what can be said to a patient with high-grade dysplasia.

“Your biopsy showed severe dysplasia (carcinoma in situ). Dysplasia is a term used by the pathologist to describe tissue that has a higher risk of progressing to cancer compared with normal tissue. Because a significant number of severe dysplasias (carcinoma in situ) can progress to cancer, we recommend removal of the lesion at this early stage. Arrangements have been made for surgical treatment. Once it is completed, you will continue to require regular follow-up care and this will also be organized.”

Here is an example of what can be said to a patient with a squamous cell carcinoma.

“Your biopsy result indicates that you have an oral cancer. This means that you require treatment. Because this is a priority, I have already made an appointment for you to see a team of doctors at our cancer centre. They are experts in treating this condition, and they will be able to help you make the best treatment choice. Although you will now be seeing different doctors, please know that I am here to support you in any way that I am able during this challenging time.”

anxious and will comply with the recommendation of biopsy, it may not be a good idea to emphasize or even mention the word cancer; merely emphasizing the need to “rule out more serious disease” may suffice in such a situation.

Be aware of repeat appointment cancellations or “no shows.” This may be an avoidance strategy requiring your attention. Contact the patient to reiterate the importance of the test and the value of complying with your recommendation. Ensure that these initiatives are documented in the patient record.

### Discussing the Biopsy Result with Your Patient

Explaining biopsy results for oral premalignant and malignant lesions and discussing management can be a daunting task, not only because of the emotion involved in such discussions, but also because this information will be entirely new to most patients. If the diagnosis is not cancer or dysplasia, a call to inform the patient that the biopsy result is benign (not serious) may be appropriate to minimize anxiety before a follow-up appointment to discuss the results in more detail and to answer any questions the patient might have.

If the biopsy result is dysplasia or cancer,<sup>1</sup> a scheduled appointment to deliver the news is strongly recommended. This provides the opportunity for a more thorough explanation, offering professional support and answering questions that may arise.

The following are key points that should be included in your discussion of biopsy results.

- Explain the diagnosis and its meaning.

- Based on the information you have provided, offer management recommendations for your patient to consider.
- Discuss the importance of follow-up.
- If the patient is a regular tobacco user, this is a good opportunity to discuss cessation.

Taking the time for compassionate, helpful communication may minimize the anxiety associated with biopsy and the delivery of results. This decreased patient anxiety may lead to better understanding and compliance with management and treatment and improved patient care. ♦

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