The dental professional's role in head and neck cancer

This hygienist shares a personal story about the disastrous effects of skipping an oral cancer examination. Dental professionals can save lives by performing a three-minute exam on every patient.

By Kathryn Gilliam, BA, RDH, FAAOSH - April 3, 2023

Dental hygiene practice is very systematic; that's why it appeals to my inner obsessive-compulsiveness. I like things to be orderly. Dental hygiene practice also appeals to my inner perfectionist. I like to do things the same way each time, so it's always done "right," and there's never the possibility of missing anything. Dental hygiene also appeals to the inner detective in me because, as hygienists, we must try to deduce why our patients are developing dental caries or why they have inflammation around a newly placed implant despite following a prescribed self-care plan. Being a dental hygienist fits me perfectly. I love taking care of patients; it's more of a calling than a job.

Being such a creature of habit when it comes to my dental hygiene practice, it surprised me to learn that once they're out into the real world of clinical practice, many hygienists alter the routines they were taught in school to accommodate patients in the short time frame we have with them. We typically have an hour with each patient, as opposed to the three hours we were given in school, so it's admittedly stressful to have to accomplish all the necessary steps in a much shorter amount of time.

I assumed that this is something we would learn and adjust to as we became more adept and proficient with experience. I never imagined taking shortcuts or skipping steps. I mean, that's not what we were taught in school. Once I was out in the "real world," I never finished a patient early, rarely had a chance to use the restroom between patients, and never ate more than a handful of trail mix at work. Who had time for lunch? Work was crazy-busy, and I was usually exhausted at the end of each day. The saving grace was that I felt proud of the level of care my patients received.

The day when everything changed

That pride held until one day, in my second year of practice, when everything changed. My schedule was packed as usual. My current patient was late and coming in later that afternoon was a patient who wouldn't allow me to recline her in the chair, nor turn her head, and I was supposed to perform two quadrants of nonsurgical periodontal therapy for her in an hour. Now I was running late, and I was stressing about getting everything done. And I did the thing I had never done before. I skipped a step: the extraoral cancer screening. I had seen this patient a few times before, and he was always fine. I did the intraoral part of the cancer screening and saw nothing of note, so I completed his appointment and didn't give it a second thought.

Until I saw him six months later.

At that time, Kevin related that he had had a "cancer scare." He had noticed a lump in his neck about eight months ago, and his wife finally convinced him to get it checked.

Eight months ago. I had seen Kevin six months ago. It all came flooding back to me like a tidal wave, and I thought I was going to be sick. I quickly sat down before my knees could buckle out from under me. The lump in Kevin's neck was there the last time I had seen him and had I bothered to perform the extraoral exam, as I always had before, I would have detected it and urged him to get a biopsy. But the last time I saw Kevin I was running late, and the patient after him was very challenging, so I took a shortcut with Kevin's care.

That one bad decision had very serious effects on this patient. But Kevin didn't seem to realize that I did anything wrong. I was terrified to admit it to him. I was afraid to lose my precious license to practice. I was ashamed to admit I had purposely decided to risk his health to save myself a few minutes and try to get back on schedule. I was so upset to hear about his radiation treatment and surgery. Kevin had almost no salivary function at this point, but he was grateful to be alive and well and have the hope of watching his children grow up.

When I performed the extraoral examination for Kevin that day, the scar from his surgery was very easy to detect. I knew I would have noticed the tumor had I done what I was taught to do. The irony was not lost on me. The woman who almost robotically followed the same checklist for every patient at every appointment dropped the ball just once, and with disastrous results.

So, please learn from my cautionary tale. I humbly share my story of shame and pain to try to prevent my colleagues from experiencing the same tragedy. Ever since the day I learned I missed Kevin's cancer, I rededicated myself to screening every patient at every appointment, regardless of age. This is the message and mantra I share with conference attendees and coaching clients. Screen every patient at every appointment. If it's been a while since you performed this screening, you will get no judgment from me. My mission is to inspire, not to shame anyone. I want to help clinicians feel confident in knowing what to do and what to look for. A thorough screening can be done in only three minutes, so there is no excuse to skip it.

What can dental professionals do?

The statistics haven't improved. One person dies every hour in this country due to head and neck cancer. I I've been quoting that same statistic for the past 30 years. How can we make a difference? One way is by educating our patients. I'm not talking about patient education on the dangers of smoking cigarettes. We've done a great job of that; people know that using tobacco can increase their risk of cancer. What they may not know is that oral sex increases their risk of oral and oropharyngeal cancer.

"Are you saying that you want me to talk to my patients about oral sex?" asked one of my client hygienists incredulously. I replied, "That's exactly what I'm saying."

Can you just imagine that team meeting? It happens all the time when I am in the office with my coaching clients. Initially, I'm met with resistance. I understand. I felt the same way at first. It's awkward and uncomfortable to talk to people about oral sex. But whose cancer is this? Head,

neck, oral, and oropharyngeal cancers are our cancers. And we are health-care practitioners. We can't abdicate our responsibility to educate our patients about their risks just because it's awkward. We must step into professional health-care practitioner mode and give our patients the facts they need to protect themselves and their families.

The facts

When I was in dental hygiene school, I learned that the number one priority for dental professionals is prevention, and the number two priority is early detection of disease. Therefore, it seems prudent to educate our patients regarding the risks of HPV so they can protect themselves adequately to help prevent infection. The following facts may be very motivating.

Approximately 54,000 Americans will be diagnosed with oral or oropharyngeal cancer this year.1 That's almost 148 people diagnosed every day, or six people whose lives are turned upside down with this frightening diagnosis every hour. In the US this year, we can expect 11,230 deaths from oral and oropharyngeal cancer. That's a loss of 30 people every day, or more than one person every hour.1

When I was a new hygienist, the biggest drivers of oral cancer were the use of tobacco and the combination of tobacco and alcohol. Those risk factors remain a concern, but the biggest driver of oral and oropharyngeal cancers now is the human papillomavirus (HPV). HPV is thought to cause 70% of oropharyngeal cancers in the US. HPV is the most common sexually transmitted infection in the US, with over 80% of Americans exposed during their lives. Fortunately for most people, the immune system will clear the virus within two years. When the virus is not cleared, however, the possibility of a cancerous conversion increases.2

Because a sexually transmitted infection (STI) is now the most common cause of oral and oropharyngeal cancer, we must address this with our patients. Many of us have no trouble cautioning our patients against the use of tobacco and excess alcohol, but we feel very uncomfortable at the idea of discussing an STI and how we are exposed to them. To those who address these concerns with their patients, I salute you and thank you for being great role models as dental hygienists practicing as true health-care practitioners. For those of you who don't include this in your practice yet, what will it take to implement this level of communication?

Sexual contact, including oral sex (which is often considered "safe sex" in our culture), is the greatest risk for HPV infection. Avoidance of unprotected sex, including oral sex, is the best way to prevent HPV infection. Most experts agree that the only 100% "safe sex" is abstinence.3

Safer sex, meaning the use of condoms (and dental dams for oral sex) should also be discussed with dental patients. In the case of minors, it's prudent to discuss the issue with the parents initially and get permission to inform their child of the risks of HPV infection and how to prevent it. It can also be beneficial to ask parents if they would be present in the treatment room while you educate the parent and the child. This could be an opportunity to facilitate a frank conversation between the parent and child once they return home.

I've had very positive responses from most parents I've talked to about discussing health risks such as HPV with their children. When I coach my client teams about discussing potentially

delicate topics such as this with their patients, many are hesitant to do so. I remind them and my peers that we are health-care providers first and foremost. We must leave any judgment or personal embarrassment behind and focus on the prevention of a deadly infection. We owe it to our patients to fully inform them of the risks of HPV and head and neck cancer. That's worth a few moments of awkwardness or discomfort.

Cancer screening review

Always keep in mind the fact that some patients, especially those who have been victims of abuse, may be sensitive to and triggered by this type of touch during oral exams. It is helpful to introduce the examination by saying something like, "I'm going to perform a head and neck cancer screening. It involves me touching all around your head, your face, and your neck all the way down to your clavicle." At the same time, I show my patient by indicating those structures on my own head and neck. If the patient is unable to tolerate this type of touch, they have this opportunity to refuse.

To perform an extraoral head and neck cancer screening, examine the extraoral features of the head and neck, from the top and around the head down to the clavicle. Pay special attention to the hairline and around the ears and palpate the lymph nodes. I warn my patients as I approach the clavicle: "I'm going to get a little bit personal if that's all right." I ask my patients to round their shoulders forward to create a depression that makes the examination in that area more effective and involves patient participation, which is beneficial in many ways.

To examine the intraoral features of the oral cavity, observe and palpate the lips, the labial and buccal mucosa, the front two-thirds of the tongue, the retromolar pad, the floor of the mouth, the gingiva, and the hard palate.

The oropharynx includes the palatine and lingual tonsils, the back one-third base of the tongue, the soft palate, and the posterior pharyngeal wall. We are limited in our ability to visualize the oropharynx without the scopes available to medical physicians, so we do the best we can.

One client hygienist was so inspired when I taught his team my version of a spa-like head and neck cancer screening that he said to his first patient that afternoon, "You are cancer free!" While I appreciate the enthusiasm, I caution my teams never to say anything suggesting that everything is fine, because without advanced imaging or blood tests, we can't know that for certain. Instead say, "I don't detect anything unusual." The reality is that we don't have complete access so we can't guarantee that there is no cancer developing out of range of our eyesight or beyond what our fingers can perceive.

While imperfect, the screening that we perform is the only way we have an opportunity for early detection, so it's well worth doing. Use cancer screening as one way to elevate your identity and partner with your patients to save lives in the dental office.

Editor's note: This article appeared in the April 2023 print edition of RDH magazine. Dental hygienists in North America are eligible for a complimentary print subscription. Sign up here.

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Three minutes to save a life

The CDT dental codes D0150, D0120, and D0180 have been edited to read "oral cancer evaluation" instead of "oral cancer evaluation where indicated." The significance of the change in terminology means that this evaluation is no longer optional. An oral cancer evaluation is mandatory for every patient.

Extraoral evaluation:

- Screening questions: Voice changes? Hoarseness? Pain in the ear (unilateral)? Feeling the need to clear the throat/something caught in the throat?
- Observe for symmetry
- Observe hairline and part
- Observe face, eyes, ears, skin, lips, breath

- Palpate TMJ opening and excursions
- Lymph nodes: preauricular, postauricular, occipital
- Lymph nodes: tonsillar, submandibular, submental, and parotid glands
- Lymph nodes: cervical and clavicular
- Thyroid gland and swallow

Intraoral evaluation (observe and palpate):

- Labial mucosa, vermilion border, commissures, and lip-tie
- Buccal mucosa
- Floor of mouth
- Tongue: dorsal, ventral, lateral borders, tongue-tie, mobility, and lingual tonsils*
- Hard palate, soft palate, uvula, tonsillar pillars, palatine tonsils*, and oropharynx*

Signs and symptoms of HPV-related head and neck cancer

- Feeling a lump in the throat or the need to clear the throat
- Swelling on one side of the neck or a swollen lymph node
- Difficulty swallowing
- Pain in one ear
- Hoarseness or change in voice
- Speech difficulty
- Difficulty moving tongue
- Feeling of numbness or tingling on the palate or elsewhere in the mouth
- Loss of appetite
- Rapid weight loss
- Weakness and excessive fatigue

^{*} Visualization of these structures may not be fully possible within the confines of our technology.