CHANGING THE ORAL CANCER PARADIGM OF LATE DISCOVERY.

BY BRIAN HILL

For more than half a century, oral and oropharyngeal cancers have been out of the mainstream view of the American public, have seen their death rate remain unchanged, and until recently had no national early discovery effort directed at them. The morbidity of treatments — that the roughly 59% who survive five years after diagnosis experience — is significant, (a death rate significantly worse than other cancers whose names are more commonly recognized), and leaves patients with serious quality of life issues that only get worse each year as they move further into survivorship. There are many ways in which this paradigm can be improved, and we are on the cusp of several opportunities to change much of this.

Necessary change is multifaceted. We must increase awareness of this disease among Americans, and the risk factors that are within their control to avoid it, along with knowledge of the early signs and symptoms that will allow them to self-discover — bringing them to appropriate dental or medical professionals at earlier stages. We must increase the opportunistic screening of patients who visit a dental office. Dental professionals see approximately 60% of the U.S. population each year. Implementing vaccination programs that will eliminate HPV as a cause will change incidence in the next generation of Americans. Spending on more targeted, actionable research that will improve treatments and long-term outcomes must be funded. While much of this will require years to implement and involve high dollar investments, a very impactful immediate opportunity is rapidly developing: the engagement of the dental hygiene community in the early discovery of suspect tissues and early signs and symptoms.

The importance of this opportunity cannot be overstated. With over 150,000 hygienists working in communities across the United States, they have the numbers to have an impact. With a hygiene professional seeing approximately 8-10 patients per day, they see a huge segment of the American population in their practice every year. Most importantly, they spend a large amount of time at each patient visit looking at the soft tissues of the oral cavity, where the early manifestations of oral cancer occur, and talking with their patients where revelation of a nonvisible symptom can be discovered. Lastly, their training gives them an existing skill set to identify suspect tissues, and refer them upwards in the dental community for confirmation (general dentistry), biopsy (oral surgeons and periodontists), and histopathology and diagnosis (oral pathologists). With a gold standard diagnosis now in hand, a patient may rapidly move into the world of treatment.

The Oral Cancer Foundation is developing relationships with the dental hygiene community on an individual level and through their national, state, and regional organizations to become actively engaged in oral cancer screening. Partnerships have been developed with both the American Dental Hygienists’ Association and the Canadian Dental Hygienists Association who share our vision. Note that screening involves the discovery of suspect tissues, not diagnosis of disease. We believe that as our partners in this quest, RDHs will become the leading edge of early discovery, and the paradigm of late stage finding of oral cancers, with its inherent negative consequences for the patient, will be changed.

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Visit - http://oralcancerfoundation.org/support-oef/rdh

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THE SIGNS AND SYMPTOMS OF ORAL AND OROPHARYNGEAL CANCERS.

A decade ago, we thought that we could identify those at high risk for developing an oral or oropharyngeal cancer. Historically, they were predominantly male, came from the ranks of those who used tobacco in some form, and were likely in their fifth through seventh decade of life. While that group still exists, we have learned that the rapid growth we have seen in these cancers over the last 15 years has been the result of a common sexually transmitted human papilloma virus, HPV16. Even while the use of tobacco in the United States was declining, the rates of posterior of the oral cavity cancers, in particular, were increasing. While this new knowledge has helped us understand what is occurring, we do not have at our disposal a good mechanism for the early discovery of pre-cancers (that are often manifested in tobacco-caused disease) from this new etiology or even early stage disease in those cancers caused by this virus. Add to this problem that about 8% of all oral cancers are occurring from a yet unidentified etiology, mostly on the mobile tongue, and increasingly in young women, who have no tobacco or HPV association, and we add to the difficulty of early discovery. Clearly opportunistic screening of every patient, regardless of perceived risk, is necessary.

While no current adjunctive device or oral test is helpful in finding HPV origin disease, we are not without some tools. There are some signs and symptoms, which can be elucidated in an oral history taking, and the incorporation of a neck palpation as part of the screening will reveal others. Because these symptoms are often painless in nature, they are often discounted by the patient as not of importance. Our list below breaks these down into that which is discoverable by visual and tactile screening, and those which require asking patients questions.

**Oral Cancer Signs & Symptoms**

Abnormalities that do not resolve within two to three weeks deserve further exploration, perhaps referral or biopsy. Not all signs are visible or palpable many require verbal inquiry.

- Tissue that is a different color than that which surrounds it; usually white, red, or even black.
- Any sore or ulceration that does not heal within 14 days.
- Any abnormality that bleeds easily when touched. (friable)
- A lump or hard spot in the tissue. (induration)
- Tissue raised above that surrounding it, a growth. (exophytic)
- Hoarseness or sore throat that does not resolve over weeks.
- Unexplained numbness in the mouth.
- A sore under a denture, which even after adjustment of the denture still does not heal.
- A lump or thickening that develops in the mouth or on the neck.

**Found through verbal inquiry**

- Patient reports a painless sensation of difficulty in swallowing.
- Patient reports a painless small lump on side of neck.
- Patient reports chronic ear pain that occurs on one side only.
APRIL IS ORAL CANCER AWARENESS MONTH.

For over 15 years, OCF has partnered with thousands of dental practices and treatment facilities around the country each April to offer free screenings to their community. In 2015, we would like that number to continue to grow.

Having a practice join us is a simple process. The foundation promotes April through numerous press releases and other outreach efforts to make the public aware that our partners are offering a simple, visual, and tactile screening for free during awareness month. The idea is to first have your practice listed on our April events calendar. This will only take a few minutes of your time and you can start the process at this link: http://www.oralcancer-screening.org.

OCF provides everything from downloadable patient releases and referral forms, to brochures on oral cancer for the public, to buttons and wristbands for your staff. A packet of these support materials will be sent to your office at no charge in March. A marketing guide on how to promote your office is also part of the downloadable packet, and following its guidelines will help you bring new patients to your office: http://www.oralcancer-screening.org/downloads.php.

Your office contact information is part of your free listing on our calendar. This allows members of the public to contact your office for an appointment or more information. This gives your office a chance to do screenings throughout the month, without blocking out your schedule for these screenings on any singular day.
It was a normal Sunday morning in April 2011. Julie DiNardo and her husband, Pino, were enjoying their daily cup of coffee. She glanced up at him and noticed a slight contour difference on his jawline. As a dedicated RDH and concerned wife, she began to palpate his neck and jaw. She completed an external oral cancer screening and found a spongy consistency deep within the tissue, all before breakfast.

Julie knew something wasn’t right and made a doctor’s appointment. Working in a preventive model, oral cancer screenings are a routine part of her practice with every appointment. The anatomy and texture of the neck and face is something that has become ingrained within her fingertips. The curvature of the jaw line, the symmetry or asymmetry of the face, and contour of the neck is something that is automatically scanned when greeting the patient. For Julie, treatment doesn’t only begin in the chair; in this case, it began sitting at home at the kitchen table on a sunny Sunday morning over a cup of joe.

The general practitioner that Pino saw could not detect any abnormality so he was told to go home. A second appointment was made at Julie’s insistence and, once again, her husband was told he was fine — he was given antibiotics, however. Her husband refused to return feeling like a burden to the GP so a telephone call requesting a specialist appointment was made to follow up. At this time, the texture in his neck had become thick and dense. Consequently, the ENT could not feel any oddity in the neck, but nevertheless ordered an ultrasound to be performed. It was here a large parotid tumor was confirmed. Julie told us, “As an RDH, I tried to look at the positive aspects of early detection. As a wife and mother, I was terrified.”

With his wife by his side, Pino had surgery to remove the tumor followed by 32 radiation treatments. Simply put, treatment was brutal. Julie recalls, “Life stands still while going through trauma within a family. Nothing else is important until questions are answered and procedures are done. Life is lived from procedure to procedure.”

June 2013 is when life finally returned to normal for the DiNardo family. Julie and Pino attended the AAOSH meeting in Las Vegas together. They were at the premier viewing of “Say AHH – The Cavity in Health Care Reform.” Pino sat with tears streaming down his cheeks and leaned over and quietly whispered to Julie, “Thank you.” She saved his life.

Oral cancer is unfortunately on the rise; it does not discriminate and is currently too often fatal. But it doesn’t have to be that way. Early diagnosis is the key for higher survival rates and greater treatment options. As an oral health provider, Julie encourages all professionals to take the time to provide oral cancer screenings to their patients. They only take a few minutes of your time but can be a lifetime to an individual and their family.
HPV, AN INCREASING CONCERN IN THE ORAL ENVIRONMENT.

In 2000, the paper that tied a high-risk version of a common, sexually transmitted virus to head and neck cancers appeared, changing the landscape of oropharyngeal cancers forever. Historically associated with cervical cancer, the human papilloma virus (HPV) is a virus family of up to 200 versions. Nine versions are known to be oncogenic, and another six are suspect to cause cancers to a lesser degree. It is one of the most ubiquitous viruses, and the CDC believes that most sexually active Americans will be exposed to multiple versions of the virus in their early sexual activity. While this information is shocking to many, the good news is that most Americans will have their own immune system clear the virus without ever knowing that they were infected, as it produces no symptoms that people will notice. Less than 1% will have an immune system that fails to do so. This very small percentage of individuals who have a persistent oral infection are those that may have the virus cascade into an oral malignancy.

The really dangerous part of all this is that the virus produces no detectable precancerous conditions that have been identified to date. Because of the structures, it prefers to invade the tonsils, the base of the tongue, and the surrounding tissues that are also heavily composed of lymphoid tissues, which are directly linked to the lymphatic system, allowing it to metastasize to the cervical nodes of the neck rapidly leaving the area of the primary tumor. It is insidious in its lack of symptomology that an affected individual will notice, or that is readily susceptible to current screening protocols and existing adjunctive screening devices. More often than not, HPV+ oropharyngeal cancers are found as a stage 3 or 4 cancer when a cervical node swells and, while painless and fixated, is finally noticed by the affected individual.

For the RDH community, it has never been more important to add several new components to their screening. The first of which is looking for asymmetry in the trigome caused by a swelling of one of the tonsils. There will be no visible surface lesions, and the tonsil is predominantly found to be painless. While swollen tonsils can often be associated with common infections, it is the painless and persistent nature of cancer-containing tonsils that will define those of concern. Palpation of the lymph nodes of the neck is now a “must do” part of a proper oral cancer screening. Enlarged, fixated, and painless nodes are a red flag. When such a node is discovered, there may be no corresponding issues within the oral environment, which may appear occult and free of visible problems. An oral history taking that includes questions regarding chronic hoarseness, sore throat, or a sensation during swallowing, foods feel like they are getting stuck or harder to swallow — which will be reported as painless — is a common complaint in base of tongue cancers. A persistent, unilateral earache should also be a cause for concern and further exploration when described by the patient. So while not the normal family of symptoms we have historically associated with a cancer development, we are not completely without clues to the presence of one.

Some may argue that this posterior portion of the oral environment is not the purview of the RDH or even the dental community, but that of the ENT/otolaryngology world. We must not let this idea prevail. ENTs are a referral specialty, and as such the opportunity for them to be the leading edge of early discovery takes them far away from the general masses of Americans that may feel themselves not at risk and asymptomatic. It is a screening opportunity that can readily be embraced as a responsibility and encompassed in a screening conducted by an RDH using the above-mentioned red flags as your guide.
PARTICIPATE IN OCF WALK/RUN EVENTS AND FREE PUBLIC SCREENINGS

RDHs are some of the foundation's biggest supporters at our national walk/run awareness events conducted around the country. Both as volunteer organizers of the events themselves in many cases, and as attendees at the events in their communities, their presence has a huge impact. When you participate in an OCF Walk/Run event, your efforts fuel our mission-related initiatives, patient support, public and professional education, disease advocacy, and sponsorship of research.

While we have free public screening events at all OCF awareness walks, we also help coordinate and supply events around the country with corporate partners or at events hosted by others. These are as diverse as partnering with a drug store during a general health fair at a store location or screenings at a rodeo! Any place that attracts large crowds of people is a potential screening site. From NASCAR races, to major league baseball games, to the Kentucky Derby, OCF volunteer doctors and RDHs have been there to raise awareness and offer free screenings. Please consider joining our team of screeners at these events.

Find an OCF event near you: www.donate.oralcancer.org

If you are interested in starting an event in your community, please contact OCF's Director of Events, Susan Lauria, at susan.nj.ocf@gmail.com

Be Part of the Change*. The rewards of doing good in the world to benefit others are huge. Raising awareness, offering needed service, and interacting with the public, particularly in an underserved community, will change both you and those you help.
The numbers in the infographic are certainly a surprise to most Americans: A person dying every hour of every day of the year from oral cancer. Why do we not hear more about this?

The foundation hopes that people who see the infographic quickly come away with a new appreciation for the horrible impact this disease has in our country. But we also hope that these numbers are not what any dental professional focuses on. We want you to consider that every one of those more than 43,250 individuals this year alone is someone in a fight for their life. That the battle they must wage to stay alive is difficult in ways that most do not consider. The treatments involving radiation, chemotherapy, and surgeries can be brutal and last months. People will undergo interventions that may leave them with physical damage that will disfigure them facially, prevent them from ever speaking again, never eating by mouth again in their lives, or after major surgeries, never kiss a loved one again. And we are talking about those who are lucky enough to survive five years — a number that is far smaller than other cancers you hear about with regularity. The emotional toll is huge, not just for the patient, but for their whole family. The economic toll may cascade them into the loss of jobs, and further into the inability to keep a home and be a productive part of society again. To say that the impact of this disease can be catastrophic does not fully reveal or do justice to its impact.

When you consider that many oral and oropharyngeal cancers are preventable through lifestyle choices, and in the next generation through the impact of vaccines, the opportunity for the course of this disease to be changed is certainly there. But of equal importance are things that can be done today. That is for those who come in contact with the general population in large numbers, and who are actively engaged in working in the oral environment to be engaged in early discovery of signs and symptoms and the education of the patients they see. Dental professionals are positioned to be the cutting edge of this opportunity. We must change the paradigm of lack of public knowledge that allows people to engage in preventable risk factors and hampers self-discovery. We must change the decades old problem of late discovery that directly impacts treatment related morbidity and long-term outcomes. Please join this fight today. Do not sit on the sidelines. Please be a partner to the foundation and BE PART OF THE CHANGE* that will begin to turn these numbers around.

www.oralcancer.org