

Enhancing Your Practice with Up-to-Date Oral Cancer Screening

by Mark Bride, D.D.S.
and Leslie H. Green

The American Dental Association has made oral cancer its top priority this year, and it is no wonder. It comes as a surprise to virtually everyone I meet that oral cancer is the sixth deadliest cancer in America, taking more lives per year than cancers thought to be far deadlier -- melanoma, Hodgkin's disease or cervical cancer.

The primary reason for the high death rate is that oral cancer is far too often discovered in late stage development. And even when caught while still curable, oral cancer can have potentially disfiguring effects on patients, seriously affecting their quality of life.

We, as dentists, are the first line of defense against oral cancer. No other medical professionals have this responsibility, and no others are as well poised to address this serious issue. The key is early detection, preferably in the precancerous state, when the disease can be addressed with as little invasive surgery as possible. Fortunately, there is a new tool in this war, ViziLite®, to aid in the early detection of unseen abnormalities that can progress to cancer. Approved by the FDA, ViziLite allows us to offer superior care to our patients, while reducing our risk of litigation for missing oral cancer and providing an additional revenue stream for our practices.

The Plague of Oral Cancer

On average, one American will die every hour of every day from oral cancer, a staggering statistic. Early diagnosis can make a large difference in life expectancy, as it is 90% curable when found early. Unfortunately, 70% of oral cancers are diagnosed in the late stages, and 52% of those diagnosed will die within five years. These statistics have remained virtually unchanged over the past 30 years.

High-risk Patients are the Majority of Our Patients

75% of oral cancer victims fall into a profile that characterizes a majority of our patients: people who are over 40 years old, who smoke or chew tobacco, and/or drink alcohol.

Tobacco use, both smoked and smokeless tobacco, is involved in 90% of cases, and even the cessation of smoking does not eliminate this as a risk until your patient has been smokeless for more than 10 years. Daily consumption of as little as one beer, one glass of wine or one shot of spirits also places your patients in the high-risk group.

The converse, of course, is that 25% of oral cancers are found in people with none of these risk factors, people under 40 who do not smoke or drink. So, all adult patients should receive at least a conventional soft tissue examination for

oral cancer annually. High-risk patients should receive a ViziLite exam as well.

A Growing Cost for Malpractice

The ever-present threat of medical malpractice continues to grow at an unabated rate. By far the number one reason for oral cancer medical malpractice lawsuits filed between 1984 and 2000 was failure to diagnose (86%). The remaining cases were a result of failure to biopsy, failure to refer and surgical complications. The health care professionals involved in these litigations were medical GPs and ENTs plus head and neck surgeons and dentists/oral surgeons. By far the largest jury awards were levied against the dentist/oral surgeon group, with an average award of \$874,500. In light of the fact that failure to diagnose is by far the most common allegation, each of us should exhaust every effort in soft tissue evaluation and utilize any available screening technologies. This will improve the chances of survival for your patients and will also help to protect your financial interests.

An Advance in the State-of-the-Art

The conventional oral soft tissue examination identifies pathology either visually or by palpation. Early detection is the key to patient survival. Until now early detection has been limited by

our ability to see or feel a lesion. Historically, when lesions are discovered, they routinely have already progressed to a Grade III dysplasia or CIS or greater. (See Figure 1.) With the advent of ViziLite, it is now possible to identify lesions that 1) are still confined to the basal two-thirds of the epithelium and 2) are undetectable under high-intensity incandescent lighting. The low-intensity, short wavelength, blue-white light used by ViziLite makes it possible to identify lesions before they present visually. ViziLite redefines “early detection” by making it possible for the practitioner to identify potential precancerous conditions (mild and moderate dysplasia).

Approved by the FDA

The technology to identify submucosal dysplastic tissue in non-keratinizing stratified squamous epithelium has been available since 1995. In November 2001 the Food and Drug Administration approved ViziLite as an adjunctive screening tool for use in the oral cavity, thus making it the only FDA approved medical device for such an application.

How does ViziLite work?

As a squamous cell becomes dysplastic it undergoes many changes including nuclear hyperplasia and nuclear hypertrophy. At the point where the cell has become cancerous the nucleus can occupy 90-100% of the cell volume and becomes extremely dense relative to the surrounding cytoplasm. These dense nuclei appear white when exposed to low intensity, short wave-length light. (See Figure 2.)

For a ViziLite exam, the patient is instructed to rinse for 60 seconds with a 1% acetic acid wash to remove the mucosal glycoprotein barrier. You then activate the blue-white light of ViziLite by cracking and shaking the peroxyoxalate light stick and placing it in the provided retractor. You should darken the room as much as possible, removing direct light and/or glare for accuracy. The retractor is placed in the mouth and moved to a position approximately 2cm from the tissues to be evaluated. The light is non-thermogenic, and the exam is completely painless to the patient.

What am I looking for?

When the white component of the blue-white ViziLite light is reflected off the dense nuclei of a dysplastic cell, the result is an “aceto-white” lesion with very distinct borders. Due to an alteration in the nuclear/cytoplasmic ratio, common findings such as frictional keratosis and leukodema will appear whitish. If the

ViziLite viewed lesion is distinctly white with clear margins, then the lesion contains abnormal nuclear material. In the absence of a visible lesion, this is considered dysplasia until proven otherwise. ViziLite can identify an abnormality but a definitive diagnosis can only be made by biopsy. (See Figure 3.)

Figure 1

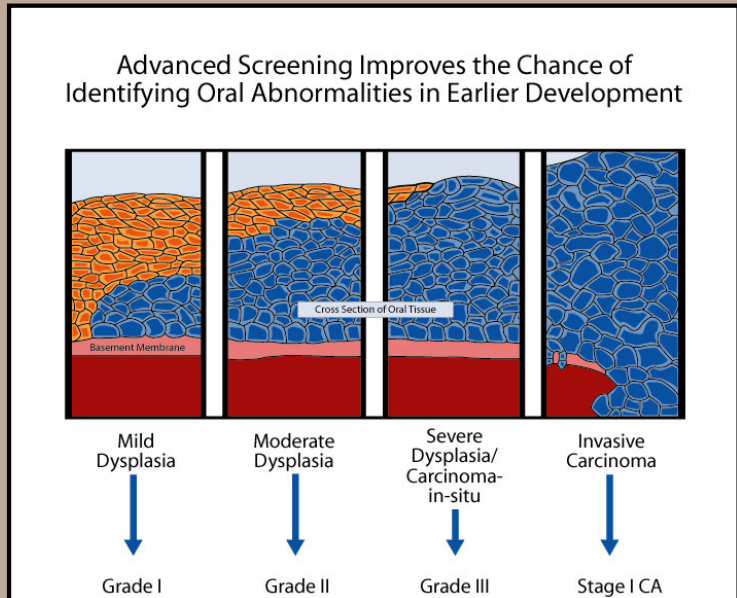


Figure 2

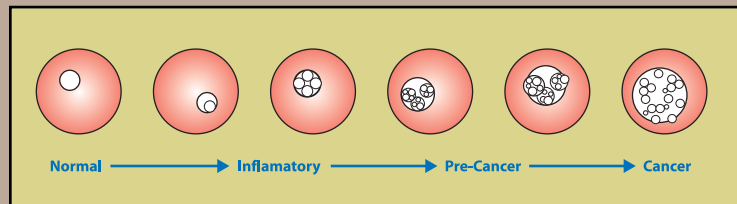
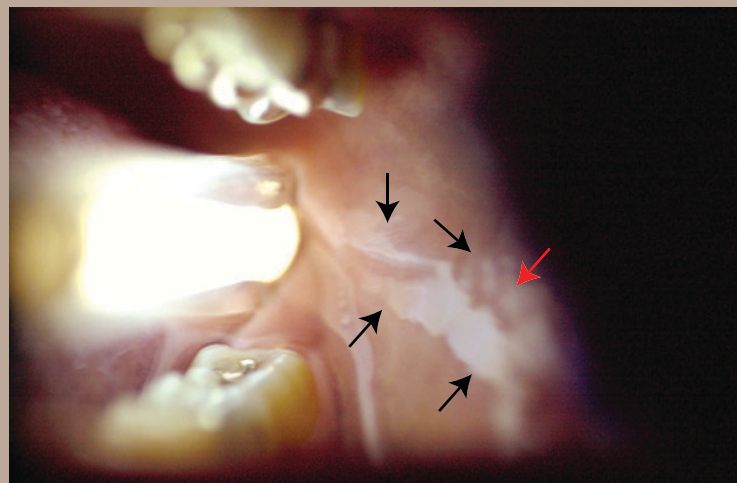


Figure 3



What if I See Something Suspicious?

For the patient who presents with a lesion discovered by ViziLite, the protocol for follow-up/treatment is straightforward. Generally, you will want the patient to return in 7-10 days to rule out any possible trauma (pizza burn, chemical burn, etc.) If the lesion persists after this time period, then refer for biopsy or perform the biopsy yourself. A mouth map is available from Zila for documenting the initial clinical appearance and making notes. Should you decide to follow a lesion vs. biopsy, comparing it to its initial appearance will allow you to identify and document any changes that may occur. The biopsy will diagnose any unexplained lesion and is the standard of care.

How Do I Incorporate ViziLite into My Practice?

It is easy to forget to use ViziLite, as it involves a change in the procedure and the standard of care in the office. And, it will not be used on every patient. Therefore, it is probably best to establish a specific protocol for when you want it used and assign one person in the office responsibility for getting it on the tray where you feel it is appropriate.

Don't hesitate to ask for direct payment for this test if it is not covered by your patients' insurance. Like an annual Pap smear, PSA test, or mammogram, this is a potentially life-saving

exam, well worth the \$45 or \$50 that the patient might have to pay. And it is fair compensation for the expertise you bring to your patients.

Building Your Practice with ViziLite

Greater emphasis on detection of oral cancer and the use of ViziLite can have three important benefits to your practice. First, and most importantly, it offers better patient care and strengthens your relationship with your patients as an important, potentially even life-saving member of their overall healthcare team. It is the proof that you are current with the latest technology and the best practices of patient care. Secondly, it may help protect you from missing a precancer or cancer that could lead to costly and upsetting litigation. Thirdly, it provides a new revenue stream for any practice. ViziLite is a win-win for us and for our patients.

Mark Bride, D.D.S.
Manager of Medical Affairs
Zila Pharmaceuticals, Inc.

Leslie H. Green
Managing Partner
Roffe & Green, Inc.

You're more than a dentist. You're a lifesaver.

Ask about ViziLite®, the fast, non-invasive test that may save your patients' lives.

More lethal than melanoma, Hodgkin's disease or cervical cancer, oral cancer is the sixth deadliest cancer in America. Yet, it's 90% curable when caught early. That's why you should know about the only FDA-cleared medical device for use in early detection of oral abnormalities in patients at risk for oral cancer.

ViziLite highlights the difference in the nuclear/cytoplasm ratio of dysplastic tissue. Normal epithelium absorbs the special illumination in ViziLite and appears dark. Abnormal epithelium reflects this illumination and appears white. It's as simple as that. And this non-invasive, painless exam takes less than 10 minutes.

Adding ViziLite exams to your practice improves the level of patient care. And you might save a life.

Risk Factors: Over 40; use tobacco; drink alcohol.

