



Early Discovery of Oral Cancer:

Improving Patient Outcomes and Reducing Treatment Costs

It is estimated that there are 640,000 people diagnosed with oral cancer annually on a worldwide basis. In North America, oral and pharyngeal cancers will claim one person every hour of every day. All too often, oral cancer is detected late, when the necessary interventions are profound and the prognosis pessimistic. It is essential to have patient-friendly clinical protocol for screening patients on a regular basis. LED Dental has developed the 'See to Treat' pathway for the discovery of oral cancer through specific channels, enabling earlier intervention treatment.

- Early discovery of lesions
- Testing for high-risk pre-cancers
- Enhanced accuracy for the excision of diseased tissues impacting recurrence

...As an adjunctive device, the VELscope Vx is effective in the visualization and discovery of a wide spectrum of oral trauma and disease, such as viral, fungal and bacterial infections, inflammation due to a variety of causes (including lichen planus and other lichenoid reactions), dysplasias, pre-cancerous lesions, cancers-in-situ, as well as squamous papillomas and salivary gland tumors.

The New Face of Oral Cancer

There is an emerging discussion to create public awareness and engage dental practitioners as the demographics associated with oral cancer shift. Historically the 'at-risk' group was the individual over 40 years of age who regularly used tobacco and/or alcohol. Today, according to the Oral Cancer Foundation, the fastest growing segment for oral cancer diagnosis is the young, healthy, under 40 demographic. New research confirms that the risk



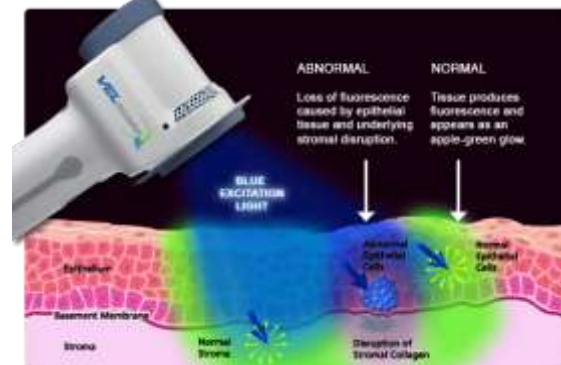
factors for oral cancer have been expanded to include two strains of the Human Papilloma Virus (HPV 16 and 18), in addition to tobacco use, frequent alcohol consumption, a compromised immune system and prior history of cancer. Young, healthy individuals now make up the group that requires urgent attention through regular oral cancer screenings. In response, LED Dental has implemented a comprehensive training program and provides expert clinician support for dental professionals who are incorporating the VELscope Vx Enhanced Oral Assessment System into their practices.

Earlier Discovery Means Enhanced Treatment Options and Better Patient Outcomes

When discovered early, the treatment outcomes for patients with oral cancer are statistically favorable. However, oral cancer is rarely discovered during the early stages when the cellular level changes are essentially invisible to the naked eye. By the time most lesions are discovered, they are late stage, with many having metastasized, and thus requiring more invasive, and often disfiguring treatment. The high

morbidity associated with oral cancer treatment can have severe emotional and financial consequences. Consequently, the five year survival rate of oral cancer diminishes to approximately 50 percent for late-stage discoveries.

The VELscope Vx is an imaging modality which is extremely sensitive to tissue changes, and its use in everyday practice can provide timely information to dentists and hygienists to enable earlier detection of abnormal tissues and provide better outcomes for patients. In fact, when discovered early, the five year survival rate for oral cancer patients is about 83 percent, significantly improved from the five-year survival rate of around 50 percent for late-stage discoveries..



Introducing Cancer Prevention Protocols to the Patient

The best opportunities for early discovery of oral cancer occur when patients receive annual examinations that include:

- A comprehensive clinical oral exam consisting of palpation and visualization of the lymphatic nodes of the neck and face
- A visual and tactile inspection of the oral cavity using “white light”
- An examination of the oral cavity with an adjunctive tissue fluorescence device such as the VELscope Vx

The VELscope Vx device fits within the oral cancer prevention protocols of a dental practice. Clinicians can incorporate a two-minute examination into every hygiene appointment, take white-light and fluorescence images with the built-in camera system, and keep precise records of their patients’ oral health with a camera attachment. Upon discovery of suspicious oral mucosal lesions, rapid followup is possible. The risk assessment test (when available) can be administered, referrals to specialists/surgeons can be accompanied with clear photographs and most importantly, the patient benefits from the favorable recovery statistics associated with early discovery.