Now you see it! Understanding, interpreting and applying autofluorescence technology for early intervention of oral pathologies.

Screening for oral cancer isn't an optional service we provide our patients; it is one of our ethical obligations to their well-being and to our oath of service. Extend your vision to a deeper level by applying autofluorescence technology to easily, safely and effectively provide a more thorough oral cancer screening examination.

PATHWAYS TO CANCER

HPV-16 (*literature also supporting 6,11,18,31,33,45, 52 & 58*): **Human Papilloma Virus** version 16 is responsible for 85% of all HPV related oropharyngeal cancers. Same strain responsible for 75% of all cervical cancers.

GARDASIL 9 ®, Cervarix® Vaccine (2-3 doses depending on age) covers ALL 9 HPV types linked to cervical, Vulva/vaginal, anal, head and neck cancers and genital warts.

- Back of mouth, throat, neck, tonsils and base of tongue.
- Alcohol and Tobacco Use. Alcohol potentiates tobacco's carcinogenic actions. 15x more cancers in SMOKERS that also drink, a synergistic effect.1
- PREVIOUS CANCER HISTORY-anywhere
 - Patients using marijuana
 - ✓ Uvulitis
 - ✓ Gingival Hyperplasia

Strong evidence published and replicated show that THC accelerates the growth of HPV+ oral and neck squamous cell carcinomas. THC in the bloodstream activates the p38 MAPK pathway, which controls programmed cell death called apoptosis. When activated, p38 MAPK prevents apoptosis from occurring, thus allowing cancer cells to grow uncontrollably.²

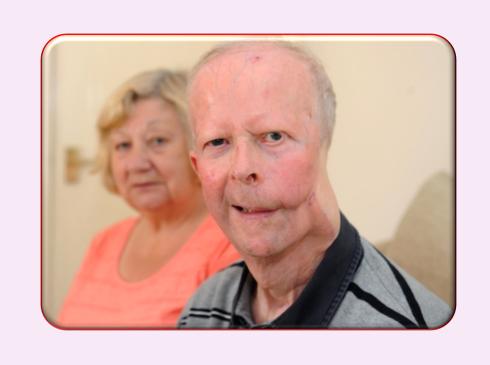
• Small minority of cases < 7% are determined to be idiopathic in cause, and are believed to be related to genetic predisposition.

Occur often in young persons (under age 40)-AGGRESSIVE

SURVIVAL

80-90% Survival rate at 5 years from diagnosis when discovered "early".

- In North America, Europe and U.K. The actual death rate is 43-44% at 5 years from diagnosis due to "late" discovery (for all stages combined at diagnosis, standardized for medians of gender and age at diagnosis).³
- High treatment related morbidity from survivors must also be considered, such as complications from chemotherapies, surgical interventions, loss of function and reduced quality of living.





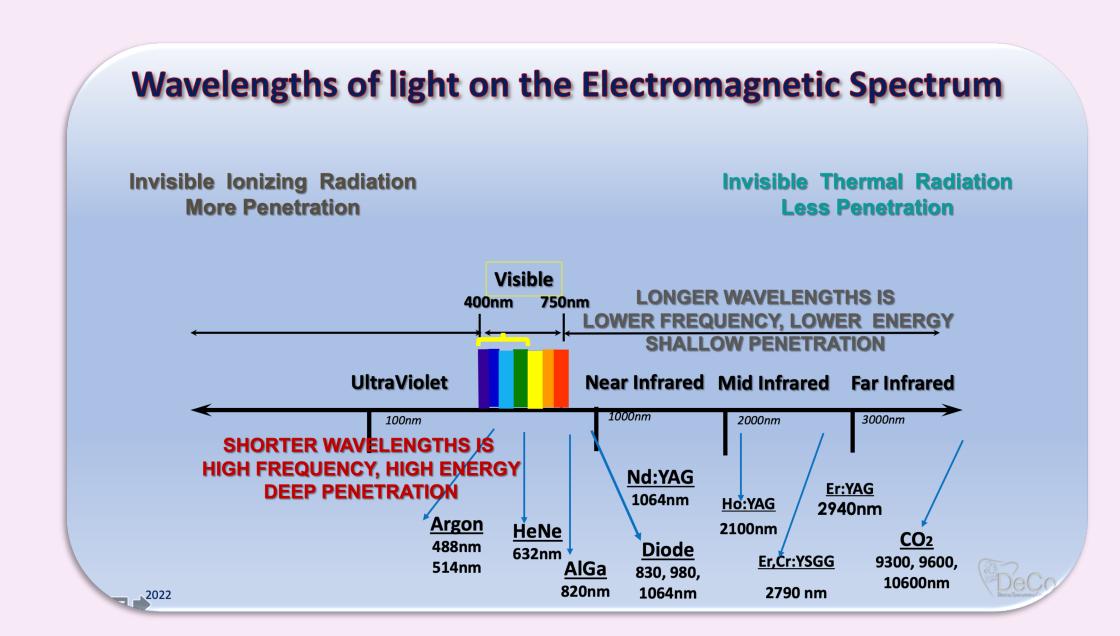


NODAL METASTASES DECREASES SURVIVAL BY 50%



Native Tissue Fluorescence

Narrow band wavelength ranges 415-540nm showing increasingly more promise for dysplastic and neoplastic detection and isolation. This technology is used extensively in GI, GYN and pulmonary examinations and has been over over 2 decades!



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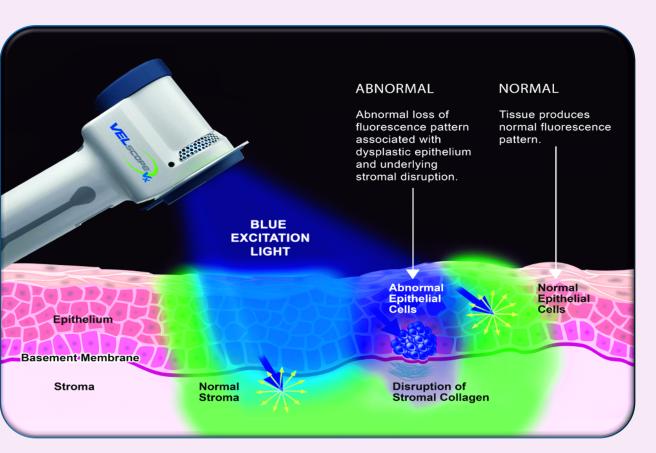
Gretchen Folk, DDS,MS Lee J. Slater, DDS,MS John Svirsky, DDS, M.Ed

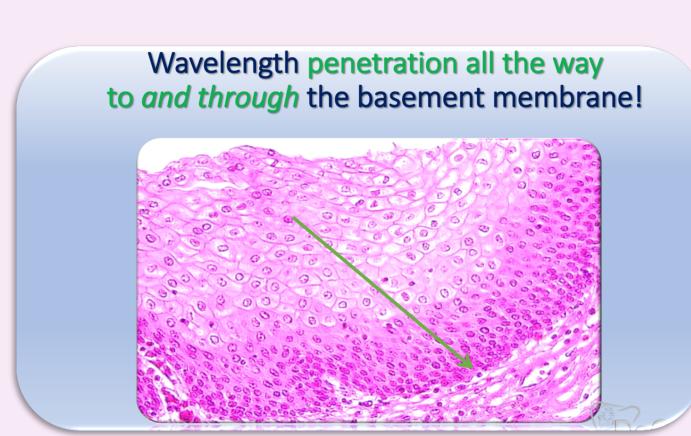
References: 1.. Pelucchi C, Gallus S, Garavello W, Bosetti C, La Vecchia C. Cancer risk associated with alcohol and tobacco use: focus on upper aero-digestive tract and liver. Alcohol Res Health. 2006;29(3):193-8. PMID: 17373408; PMCID: PMC6527045. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6527045/

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TECHNOLOGY FOR CLINICAL SCREENING

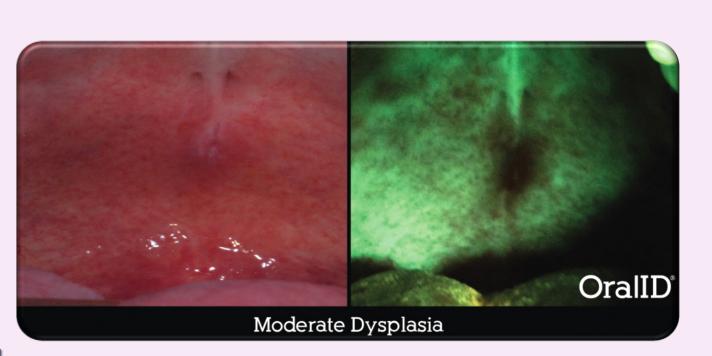




- Hand-held devices that provide dentists and hygienists with an easy-to-use adjunctive mucosal examination system for the early detection of abnormal tissue.
- Emits a <u>non-ionizing</u> light into the oral cavity, which excites the tissue from the surface of the epithelium through to the basement membrane (where pre-malignant changes typically start) and into the stroma beneath, causing it to fluoresce.
- The clinician is then able to immediately view the different fluorescence responses to help differentiate between normal and
- abnormal tissue. Non-invasive, non-ionizing, EASY, FAST and

ACCURATE.







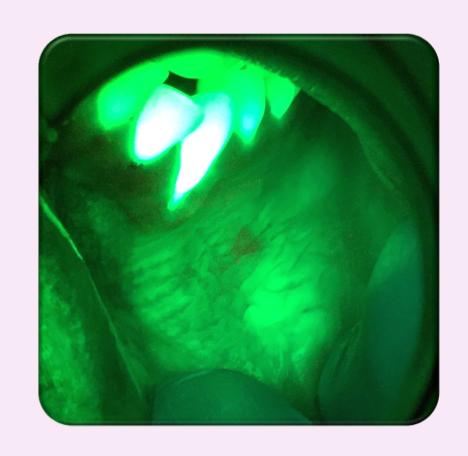


TECHNOLOGY FOR BIOPSY GUIDANCE









Patient Record Documentation

Oral Cancer Screening: Tonsils: Present or Absent, any significant findings in tonsillar areas: scarred, large, enlarged, etc.

Other notable findings: Tori? Cheek/tongue chewing? Varicosities? Solar Cheilitis on lips?

"No Apparent Clinical Pathology: NACP" "...Remaining mucosal examination is normal"

"Enhanced Oral Screening with (device)" "Pt declined enhanced Oral Screening"









