



Salivary Diagnostics to Determine Risk Factor for HPV-Related Oral Cancer

The presence of certain human papillomavirus (HPV) genotypes is an independent risk factor for oral cancer. HPV infections are becoming a source of growing concern in our society and patients are becoming more aware of this as a result of increased media coverage.¹ HPV causes as many cancers of the upper throat as tobacco and alcohol, and is the primary cause of tonsil, lower tongue, and upper throat cancers.² HPV is the most common sexually transmitted disease in the world.³ More than 24 million Americans are infected with HPV, and another 6 million people become newly infected each year.⁴

More people than ever before are at risk for oral cancer. In the past, the high-risk category for oral cancer was associated solely with excessive alcohol and tobacco use, a group typically found to be older males.⁵ Today, the fastest growing, highest-risk group is defined as healthy (nonsmoking with no excessive alcohol use) males and females, 18 to 40 years of age.⁵ Of the 40,000 cases of oral cancer diagnosed each year, 66% will be detected late, in stages 3 and 4.⁴ Most 18- to 40-year-olds have no idea that they are in a high-risk group for oral cancer, or that there is a simple, noninvasive test to detect the presence of oral HPV.⁶

As The Oral Cancer Foundation notes, statistics demonstrate that after the introduction of the Pap smear, annual deaths from cervical cancer were reduced from 12,000 to 3,900, with a 90% 5-year survival rate.⁷ More significant are the statistics compiled before the Pap smear was available; there were 23,000 cases of cervical cancer annually and 15,000 deaths.⁷ Similarly, of the 40,000 annual cases of oral cancer, there are 12,500 associated deaths, with a 55% 5-year survival rate.⁵ HPV genotypes 16 and 18 are responsible for 95% of cervical cancers and HPV 16 is found in 90% of HPV-related oral cancers.⁴ If patients are positive for a high-risk HPV genotype, they are 14 to 32 times more likely to develop oral cancer compared with those who do not have the virus.⁴ Cancers of the oropharyngeal region have doubled since 1974, and those caused by HPV are expected to surpass those caused by alcohol and tobacco within the next 10 years.² It is clear that early detection and education are key for treatment and survival.

What if those individuals at high risk for oral cancer are identified and screened more judiciously and aggressively for an earlier diagnosis at a more treatable stage? Now, with **OraRisk HPV (OralDNA Labs)**, we can. **OraRisk HPV** is the highly anticipated salivary test for HPV, the first-of-its-kind, commercially available, noninvasive screening tool for the presence of certain HPV genotypes found in the oral cavity. The collection method involves a 30-second swish and gargle with sterile saline.

With the introduction of early-detection **OraRisk HPV**, we now have an opportunity to help discover oral cancer caused by HPV. Just as cervical cancer deaths have decreased since the introduction of the early-detection Pap smear, **OraRisk HPV** can be used for early detection of oral cancer risk and assume the challenge of reducing deaths and other health care issues associated with HPV-related oral cancer.



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OraRisk HPV is an important assessment tool to use during routine oral cancer screening. Many patients are becoming familiar with the rise of oral cancer and with a routine oral cancer screening during hygiene recare appointments. The addition of this test and the information it provides will aid in the continuity of care. Many dental offices are already using the VELscope (LED Dental, Inc), Identafi 3000 ultra (DentalEZ Group), or ViziLite Plus (Zila), and patients are happy to pay for this service. These detection devices are an excellent method to detect cellular shifts within the oral cavity. Additionally, OraRisk HPV can detect HPV before it can be seen. When an area has been detected, a biopsy should immediately be done. The VELscope, Identafi 3000 ultra, or ViziLite Plus, are very accurate for initial detection, but must be confirmed by biopsy.

Conclusion

The introduction of OraRisk HPV provides oral health practitioners with the opportunity to ensure a more detailed and accurate oral cancer assessment of their patients. Using the advancements of technology will also aid in patient education and awareness that will ensure bridging the gap of oral/systemic health.

Disclosure:

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