## Teeth It's all in the spit

## Your saliva reveals a lot about your health. by Dr. Susan Maples

very day I look in the mouths of my patients and see signs of common systemic illnesses such as type 2 diabetes, sleep apnea, acid reflux, hypertension,

heart disease, and oral cancer. Unfortunately, a true oral cancer diagnosis comes at the tip of a scalpel—a tissue biopsy that is cut from the mouth and analyzed with a microscope. Dreadfully, if you are diagnosed with oral cancer you have about a 50/50 chance of survival, and we are not making progress with that ratio.

But what if we could detect oral cancer, and other systemic cancers much earlier, just by spitting in a cup? Science and industry are busy bringing forth amazing tools that analyze a drop of saliva to select out telltale "biomarkers" to detect cancer and other systemic diseases at their earliest stages.

In just a few years from now, you could have a saliva test at your preventive



dental appointment that, in about five minutes, detects early stages of oral, breast, ovarian, lung, gastric, cervical and pancreatic cancer. Imagine

the impact on pancreatic cancer outcomes alone. Last year, there were 30,000 cases diagnosed and sadly, 30,000 died. That's because, pancreatic cancer has only a 5 percent five-year survival rate. We lost a beloved team member three years ago to pancreatic cancer and I can imagine that she would still be with us if we could have detected her cancer from a chair-side spit sample a year and a half before her diagnosis, when her strange symptoms were first apparent. Currently, salivary diagnostics are being used in dental offices to detect the genetic predisposition for periodontal disease and heart disease. They can also detect the most dangerous bacteria that threatens bone loss, heart attack and stroke, as well as persistent HPV infection—the virus that is linked to oral and pharyngeal cancer.

The future of saliva testing for diseases other than cancer is very promising. Salivary biomarkers will be able to detect Alzheimer's disease, type 2 diabetes, arthritis, and Sjorgren's syndrome.

For an entertaining YouTube video on salivary diagnostics, produced by Delta Dental of Michigan, search "Drool is Cool!" Because...indeed it is!



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