The Oral-Systemic Connection Explained

n both the medical and dental professions there is little disagreement that the presence of chronic oral infection directly results in increased risk for various systemic diseases. Perhaps the most serious implication is the association between periodontal infection and heart disease and stroke. This means that maintaining good oral health and receiving regular preventative treatments are increasingly important.

Simply described, there are several hundred species of bacteria that are in your mouth at any given time. Some of these bacteria are considered harmless while others can be quite harmful. It is the harmful microorganisms that form colonies of glue-like biofilm called plaque. When this plaque gets below the gum line it infects your gums causing what is known as gingivitis. With the infection of the gingival tissue, your immune system responds and attempts to fight off these invaders, and while it may not be visibly noticeable, your gums become swollen and may bleed when you floss or brush.

Ordinarily, whenever someone sees infection they seek some sort of immediate treatment. but tender and bleeding gums are often ignored. Left untreated, the plaque builds up between the surface of the tooth root and the gingiva where the resulting inflammation creates periodontal pockets. It's through the inflamed tissue in these periodontal pockets that the bacteria and other inflammatory components enter the bloodstream and are able to be spread throughout the body where they may become troublesome for the at-risk patient.

It is important to note that while the harmful bacteria alone can be a problem within the body, (as in the direct link between oral plaque and arterial plaque), it is the inflammation and inflammatory components resulting from the chronic periodontal disease that are equally, if not more, of a threat to your overall health. The constant response by the immune system to fight the chronic periodontal inflammation results in many system-wide changes within the body that have far reaching affects. It is now believed that these system-wide changes triggered by the immune system can influence insulin-resistance

thereby increasing the risk for type-2 diabetes and they are also being linked to a multitude of other conditions including preterm low birth-weight babies, and osteoporosis.

Clearly, the body's reaction to chronic infection and inflammation is very complex and this article barely scratches the surface in understanding all of the possible implications. It is also clear that the oral-systemic association is very real and warrants special attention for all patients.

Now, consider this. The normal standard of care in dentistry calls for at least two visits to the dentist per year. Often, the frequency is increased when a periodontal condition is present. Using this model, it is likely that you may be seeing the dentist much more frequently and regularly than your primary care physician. This means that we, at Proud Smiles, are uniquely positioned to be the first to identify, diagnose, and treat, chronic infection and inflammation that could have



system-wide implications and we are often the first line of defense for our patients.

In short, it is more important than ever for all patients to be attuned to the seriousness of periodontal disease, its treatment and prevention, and the system-wide implications of chronic oral infection and inflammation. How can you determine if you or someone you know is in need of periodontal treatment? The easiest determinant is the presence an odor from the patient's mouth which commonly signals a bacterial imbalance.

If you or someone you know are concerned about periodontal disease and its possible effects on your body, we are ready to help. As a health-centered dental practice we pay special attention to any oral or dental condition that can have far-reaching affects and will work with you to develop a personal treatment plan that will help you achieve optimum oral and dental wellness.

Brenda Paulen, D.M.D. 404-257-0091 5290 Roswell Road - Suite F - Atlanta, Georgia 30342