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## Gum disease and heart disease

Clarifying the AHA statement. *By Dr. Susan Maples*

Q: I heard on the news that the American Heart Association (AHA) made a statement that gum disease does not cause heart disease after all. What do you make of that?

A: While this is technically correct, the media coverage did not accurately reflect the conclusions of the AHA, and as such has stirred some confusion. The actual AHA statement, in a paper published online in *Circulation* on April 18, 2012, says that “although observational studies support an association between periodontal disease and atherosclerotic vascular disease independent of known confounders, they do not support a causative relationship.”

Notice here that the studies have noted **associations** between gum disease and CV disease, but they don’t confirm a **causative** relationship.” What’s the difference?

How are associated risk factors to disease different from a direct causal relationship?

Let’s start with a risk versus cause relationships that we are more familiar with. Smoking is a significant risk factor *associated* with lung cancer, but it has never been proven that it *causes* lung cancer in humans. In fact, many people who smoke don’t get lung cancer.

Likewise there remains a large body of research supporting the fact that periodontal disease is a significant risk factor for cardiovascular disease, independent of shared risk factors such as smoking and obesity. In other words, having active gum disease makes you more likely to develop CV/heart disease even if you are not obese tobacco addicted. Yet there are people who have each one of these risk factors that do *not* develop CV/heart disease—thus we can’t say it is a definitive “cause”.

Some of you already know that the AHA guidelines recommend antibiotic prophylaxis prior to dental treatment to prevent endocarditis (heart infection) for patients who have had heart transplant, prosthetic heart valves. This would seem to indicate a concern about oral bacterial infection as a possible *cause* of bacterial heart infection. Additionally there have been eight studies that looked at gum disease in relation to myocardial infarction (heart attack) and all the studies found a link!

So if you have any signs or symptoms of active gum disease such as bleeding, red, puffy gums or a disease diagnosis from your dentist and hygienist, giddyup! Address your disease with all your dentists’ recommendations and a good measure of self-discipline in your daily home care. Healthy gums and bone support is critical in keeping your teeth for a life time, and yes, it may indeed save your life!