



Oral and General Health - Exploring the Connection

Research Review December 2009

Associations between Periodontal Disease and Atherosclerotic Cardiovascular Diseases (CVD)

CONSUMER VERSION

The research for this report was generously provided by Delta Dental Plans Association and performed by the University of Michigan by George W. Taylor, Wenche S. Borgnakke, Patricia F. Anderson and Carol Shannon. DDPA 2009.

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Introduction

Many people have gum disease (periodontitis). Most people in this country die from diseases of the heart and blood vessels (cardiovascular disease). Heart attacks and strokes are the leading causes of death here. Millions of other people live with these diseases every day. Because of these diseases, they are not as happy with their lives. It also costs a lot of money to treat heart diseases and stroke.

A dental research team at the University of Michigan looked at many scientific reports to see if there is a link between gum disease and heart disease or stroke. We know some of the reasons that people get heart disease and stroke, for instance high blood pressure, high cholesterol (fat in the blood), and smoking. These reasons do not explain all heart disease or stroke. The questions we wanted to answer were:

Does Gum Disease Cause Heart Disease or Stroke?

How Does Treating Gum Disease Affect Heart Disease?

If You Have Heart or Blood Vessel Disease, Does It Help to Treat Gum Disease?

Does Gum Disease Cause Heart Disease or Stroke?

Many scientific reports say there is a link between gum disease and heart disease and stroke. Those reports say people with gum disease are up to two times more likely to have strokes and heart disease. Several of those reports are summaries of the best research available about this link. Even if you are healthy in other ways--you don't smoke, don't have diabetes, don't have high blood pressure--having gum disease may make it more likely that you will get heart or blood vessel diseases. Experts believe that people with gum disease need to know they may be more likely to get heart and blood vessel disease. Experts also believe that people with heart or blood vessel disease should be checked for gum disease and treated if necessary.

How Does Treating Gum Disease Affect Heart Disease?

At this time, we cannot prove that treating gum disease will prevent diseases of the heart, blood vessels and stroke. This is because there are no research reports that show treating gum disease makes people less likely to have heart disease or strokes. Gum disease creates inflammation inside our mouths. Inflammation is one way our bodies react to having an injury or infection. Normally inflammation helps our bodies heal, but it can make new problems if it goes on for a long time. Inflammation can happen inside our bodies even when we don't know we're sick. We know now that inflammation in the body can help tell us how healthy the heart and blood vessels are. This is true also when heart or blood vessel disease is just starting. These diseases are often hard to find when they are new. A test can find a special part of the blood, "C-Reactive Protein" (CRP), that is a sign of inflammation. CRP is high when we have gum disease. It is high when we have heart disease. Treating gum disease lowers CRP. We do not yet know if this will prevent heart disease or stroke.

If You Have Heart or Blood Vessel Disease, Does It Help to Treat Gum Disease?

Experts are trying to find the answer to this question. Some research shows that gum disease makes people get more heart or blood vessel disease. Some research also shows that treating gum disease helps the heart and blood vessels work better. So treating gum disease may help people stay healthier even when they already have heart disease. Having healthy gums might help.

CONCLUSION

Having gum disease may make you more likely to get heart and blood vessel diseases. At this time, we do not know if treating gum disease will prevent heart disease or strokes. Treating gum disease lowers inflammation in your body. So treating gum disease might lower the chance of getting heart disease and stroke. If you already have heart disease, making your gums healthy could help slow down your heart disease. Making sure your gums are healthy may be one way to help keep your heart healthy or prevent a stroke.