Diabetes and gum disease

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Diabetes is a very common health problem that, if not well controlled, can have many serious health effects. In type 2 diabetes - by far the most common form - sugar (glucose) levels in the bloodstream are higher than normal. This may be because the body is not making enough of the hormone insulin, which is needed to help cells take up sugar from the blood to use for energy or energy storage, or because the body is not responding to its insulin as well as it should, or for both of these reasons. This type of diabetes usually starts in middle age and is often linked to being overweight and having a sedentary lifestyle, but it is becoming very common in younger people, even in children. The diabetes problem affects all populations and is becoming a “global epidemic” whose complications include sufferers being more likely to develop conditions such as heart and kidney disease, leading in turn to a lower life expectancy.

Gum disease is one of the most common diseases seen in humans. In its most severe form, known as periodontitis, the gum tissue and bone that support the teeth are destroyed over time, leading to loss of teeth. Periodontitis affects about half of all adults and as many as 85% of people over 65-years of age.

Although diabetes and gum disease may seem like very different diseases, dentists have known for a long time that people with diabetes are more likely to get gum disease. Also, their gum disease may be worse and harder to treat, compared with people who do not have diabetes. If a person’s blood sugar levels are under good control, however, gum treatment is more likely to be successful. But that’s not the end of the story: scientists are now finding that gum disease may also have an effect on diabetes, making blood sugar control more difficult. Is is clear and that keeping the gums healthy is an important part of looking after the overall health of a person with diabetes.

How gum disease can affect diabetes

At a recent meeting of top experts in dental and diabetes research from around the world, scientists looked closely at all the latest research into diabetes and gum disease to reach an agreement on, and to find a new understanding of how these two diseases might affect one another. They found that:

• In people with diabetes, those who have severe gum disease have higher blood sugar levels (measured by a test called HbA1c), compared with those with healthier gums
• Even in you don’t have diabetes, your body’s control of blood sugar levels is not as good as it should be when you have severe gum disease
• The worse the gum disease, the more likely a person is to go on to suffer damage to other organs in their body because of their diabetes – for example, heart or kidney disease
• Having severe gum disease might actually increase your chance of getting type 2 diabetes.
**Why does gum disease affect diabetes?**

It is not yet completely understood why gum disease should have an effect on diabetes, but scientists think that some of the germs that infect the gums when we get gum disease can escape into the bloodstream. This triggers a reaction from our body's defence system, which can lead to the release of powerful molecules that have harmful effects on other parts of the body, resulting in worsened blood sugar control.

**Can gum treatment help diabetes control?**

The good news is that treatment for gum disease, such as the professional cleaning and regular care given by your dentist or hygienist, can lead to a fall in blood sugar levels in some people with diabetes. The improvement is about the same as you might have if you added a second drug to your usual diabetes medication. This means that, if you have diabetes, improving your gum health could really help you control your diabetes and may also help lower your risk of diabetes complications. If you don't have diabetes but think you have a chance of getting it (maybe because it's in your family), having any gum disease treated is one of the things that might help you to stay healthy, alongside losing weight and taking exercise, as advised by your doctor.

The latest research on gum disease and diabetes shows the importance of keeping your gums as healthy as possible by careful cleaning at home and having regular dental check-ups. That way, any gum disease can be picked up early and treated. Having healthy gums is an important step towards better overall health. The full report is freely available at:

You may also access videos from the organisers at [www.perioworkshop.org](http://www.perioworkshop.org)

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