



**Dentistry**

**And**

**Diabetes...**

**What You Must Know  
Before Choosing a Dentist.**



## **Re: Special Report**

### **Dentistry and Diabetes:**

#### **What You Must Know Before Choosing a Dentist**

No one enjoys going to the dentist, but for people with diabetes, getting that cleaning and check-up are especially important. The link between diabetes and oral health can't be ignored.

While everyone is prone to periodontitis, or diseases of the tissues surrounding the teeth and gums, people with diabetes often have more severe cases that can both cause and predict additional diabetic complications.

#### **Defining Periodontitis**

Periodontitis or periodontal diseases involve inflammation and destruction of the tissues supporting and surrounding the teeth, including the gums and supporting bone. Periodontitis destroys the periodontal ligaments or connective tissue fibers that attach the tooth to the bone causing resorption of the alveolar bone (tooth socket). Consequently, the gums swell, redden, change shape, bleed, teeth loosen and pus forms. With the loss of soft tissue and bony support, deep periodontal pockets may form that foster bacterial growth.

The formation of plaque on the teeth is the first step toward periodontal disease. Plaque, the white sticky substance that collects between teeth, is often the start of periodontitis. Made of microorganisms, dead skin cells and leukocytes (infection fighting white blood cells), it can be removed by brushing and flossing regularly. If it is allowed to build up, it will harden and turn into tartar. Tartar can only be removed with a professional cleaning at the dentist's office. Both plaque and tartar make the gums vulnerable to infection.

If an infection enters the gums it is referred to as gingivitis, the first stage of periodontitis. Bacteria that collect and breed at the gum line and the groove between the gum and the tooth cause the gums to redden, swell and bleed. This response is normal but can also lead to periodontitis. Gums affected by gingivitis often bleed and are sensitive, but not always. Other signs include swollen gums, loose teeth, a bad taste in the mouth and persistent bad breath.

### **The Relationship to BG Control**

BG control and good oral hygiene seems to be the key to avoiding most dental complications. Everyone is at risk of developing periodontal disease, but all people with diabetes, regardless of age or type of diabetes, are more susceptible. There are several reasons for this.



For one, people with diabetes have more sugar in the mouth that provides a more hospitable environment for hostile bacteria. This makes all forms of periodontal disease more likely.

High and fluctuating BGs are also a big factor in the increased risk of periodontal disease. Poor BG control means higher degrees of periodontitis and more vulnerability to complications.

It also makes healing more difficult once an infection sets in. Just like diabetics with poor BG control have a hard time healing wounds and infections on their feet, their bodies have a hard time fighting infections and healing wounds in the mouth.

At the same time, on-going infections may make BG control more difficult. Inflammation and infection affect BG control no matter where they occur. But the mouth is often overlooked, as most doctors do not look in the mouth. Once an infection takes root a vicious cycle ensues making metabolic and infection control a struggle. This cycle can have drastic consequences. If oral infections get out of control they can lead to BG control problems serious enough to land a person with diabetes in the hospital, to say nothing of the damage to the teeth and gums.

Gum infections can also impact insulin needs. Authors of a study cited in September's 1997's Practical Diabetology concluded that when an infection is rampant, patients with diabetes often have increased insulin requirements. If periodontal disease is treated and gingival inflammation is eliminated, these insulin needs often decrease.

Collagen, which is a building block of the tissue that attaches teeth to bones and the surrounding soft tissue, is also affected by diabetes. Diabetes' effect on collagen metabolism may make an infection potentially more destructive.

### **Reduced Salivary Flow**

Patients with diabetes may also experience dry mouth as a result of reduced saliva. Neuropathy and certain medications may be the cause of reduced salivary flow. Saliva is important to wash residue off teeth and gums and prevent tooth and gum disease. Ask the dentist about products that moisten the mouth or increase saliva.

Drinking lots of fluids may help alleviate the problem and there are products available that can help keep the mouth moist.

### **It's All Connected**

The development of periodontal disease may reflect the presence of other problems related to BG control such as retinopathy.

Retinopathy and dental problems are closely related. If you look at a population that is having eye problems, that same population is likely to have dental problems. If a person is diagnosed with retinopathy, they should make sure that their mouth is being examined and the gums are healthy.

Conversely, if there is serious gum disease there may be other diabetic complications taking place in the body.

Problems that begin elsewhere in the body should also provide clues for health care professionals. The presence of microalbuminuria and neuropathy are signals to check the mouth for potential complications.

### **Prevention**

As with all diabetic complications, an ounce of prevention is worth its weight gold. By far the most important step that can be taken is to brush and floss regularly. It is advisable to discuss proper brushing and flossing techniques with your dental team. Some of the fundamentals might surprise you. For example, it is recommended that you brush for a minimum of three minutes, which, when put into practice, is longer than one might imagine.



in

## **In the Chair**

Prevention also includes making and keeping the often-dreaded dental appointment. We suggest seeing the dentist twice a year, or as often as necessary. If you are avoiding the dentist due to fear and or loathing, here are some strategies to make it a little easier to deal with.



It is best to schedule dental appointments, about an hour and a half after breakfast so that the appointment does not interfere with regular meal times. Test your BGs before you go to the dentist and test them while you are at the dentists office. Make sure to stick to your regular insulin and/or oral medication schedule to avoid BG problems. It is also important to discuss your diabetes with your dental team.

Once at the dentist, voice concerns and report any abnormality, such as gingival bleeding. Healthy gums are usually light-pink, snug around the tooth and don't bleed.

## **Treatment**

If an infection is already present, it must be treated before any significant procedures can be attempted. Once diabetes is under good control, oral surgery can be performed without complication.

## **Dentures**

Since periodontal disease can lead to tooth loss, many patients are fitted for dentures. Patients wearing complete dentures should see the dentist once a year to examine all soft tissue areas. Partial dentures require attention to

hygiene just like real teeth. They need to be removed and cleaned daily. Wearing dentures continuously and failing to take the proper precautions can promote the growth of mouth fungus (candidal colonization) leading to thrush. Dentures may also be ill-fitting and uncomfortable. This is because the gums of people with diabetes may be especially sensitive. This in turn makes eating, and maintaining good health and proper BG control more difficult. Dental implants can be another viable option for tooth replacement for people with diabetes.

### **Taking Precautions**

Dental therapy for people with diabetes does not have an established criteria, although dental offices record medical conditions such as diabetes they may not be prepared for an emergency resulting from diabetes. It is important to discuss your diabetes and possible low and high blood sugar scenarios with your dental team.

The dental team needs to know if their patients take oral agents or insulin because that means special precautions must be taken. Dentists caring for patients with diabetes should have a calibrated glucose meter, glucose tablets or fruit juice, and a glucagon kit available.

They should also be familiar with the common signs of hypoglycemia such as loss of coordination, blurry vision, palpitations, rapid heart rate, sweating and shaking. He also suggests finding out if a patient with diabetes has hypoglycemic unawareness, a condition in which they experience few if any signs and symptoms of low blood sugars.



A common situation leading to hypoglycemia at the dental office is a patient skipping breakfast before an appointment but taking the regular amount of insulin.

Severe hyperglycemia may occur as well, but less frequently. Acetone breath and dehydration, dry mucous membranes and changes in mental status are signs that blood glucose is too high and dental procedures should be postponed.

**Read this patient's story to understand the dental-health to diabetes connection...**

**“I’ll dance at your wedding...”**



**Sure, I know it's a long time down the road. But, when my daughter, or my son, decides to get married, I'm going to be healthy enough to dance.**

**And, I plan on dancing all night long.**



I lost my father to complications from diabetes and when I thought about my family and my responsibilities to them, I was downright scared. My father was in his early 50's and I am now 38. So, when I noticed this winter that I was constantly thirsty and feeling run down, I decided to get it checked out.

I decided to visit my regular doctor. During the appointment, I had several tests completed that officially diagnosed me with diabetes. He prescribed medication, exercise, and diet.

The exercise and diet part are probably the hardest part of my treatment program. I now have to get up and move instead of sitting on the couch watching countless hours of TV with a bag of potato chips. But I made a promise to myself and to my family.

I also decided to visit a new dentist for a check-up. A friend of mine told me that there is a possible link between diabetes and periodontal disease; also known as gum disease and I wanted to cover all of my bases.

The dentist said he was glad that I was taking an active role because I did indeed have the beginnings of periodontal disease and he said I should be treated. I once again thought about my kids and dancing at their weddings, about holding my first grandchild, and maybe seeing my grandkids get married.

So, I knew in addition to the exercise, good diet, and medication from my doctor, I was going to have to take more drastic steps and treat my periodontal disease with regular periodontal treatment sessions.

I decided to go with the non-surgical route to treat my gum disease. This involved treatment to remove plaque and calculus through scaling. I also started using a special toothpaste and mouthwash. And, of course, that old, reliable enemy of gum disease – flossing.

I am so happy with my decision. It was scary to go through some of the tests, but I know with my hard work and regular visits to the dentist I will be there to walk my daughter down the aisle.

I'm already starting to feel better. I want to always be there for my kids and that's why I'm so happy I've decided to take charge of my health - including my oral health.

## **How to choose a dentist if you are diabetic**

For years you've visited the same dental office for your regular cleanings and the occasional cavity. You've had few complaints about your care—certainly none big enough to merit changing dentists. But recently you've moved, or your dentist has retired, or your insurance plan has changed, and you're obliged to make a switch. You know that finding a good dental team is important, so how do you begin the search? What do you look for in a dentist and dental hygienist?

Obviously, the practitioners' skills and the safety precautions and technology employed in the office are important criteria. Then there are practical considerations, such as the proximity of the office to your home or workplace, the office hours, accepted insurance plans, fees, payment policy, and ability to accommodate emergencies. A comfortable office environment also matters, particularly if you have any anxiety about dental work. You want a dental team with a good "chair side manner," one that is willing to listen to your concerns, answer your questions, and explain what they're doing and why.

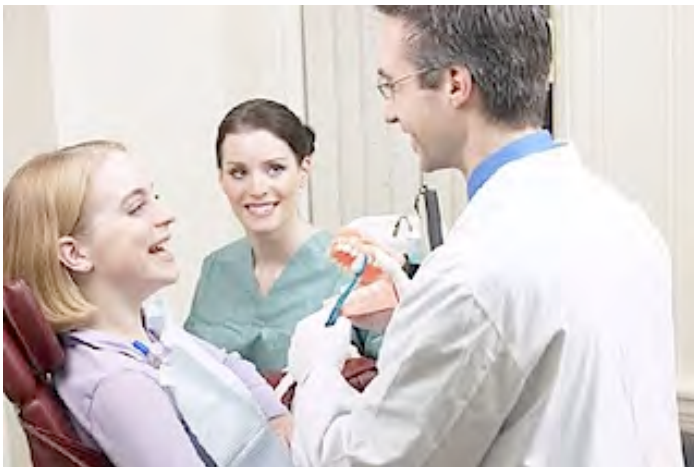
Few of these details can be found by flipping through listings for dentists in the phone book. Finding the right dental-care provider will take some time and research, and it is best done under non-emergency conditions. Start your search well before you're due for a checkup.

## **Background information**

A dentist's technical skills are of utmost importance, but evaluating these skills is not always easy for someone who is not a dental professional. One sign of professional commitment, however, is membership in a professional dental organization such as the American Dental Association (ADA) or a state dental association. The dentist's receptionist should be able to tell you over the telephone if the dentist maintains such a membership.

When you call a dentist's office, it's perfectly all right to ask the receptionist his or her name and how long he or she has worked with the dentist. Does the receptionist sound professional and courteous? Does he or she seem proud of and knowledgeable about the practice? If the dentist treats his staff well and his dentistry is of high caliber, employees tend to brag a little, which is usually a good sign. Any reluctance on the part of the staff to answer your questions, on the other hand, is a worrisome sign.

When you visit an office, take a look around. Dentists who are proud of their work may display "before and after" photos in a photo album or on the walls



in the reception area. You can sometimes tell if the dentist's work is not just cosmetically admirable but also technically sound by looking at the gums in the "after" photos. Healthy gums are pale pink, not bright red. A conscientious dentist will not do cosmetic work if a person's gums

are in poor condition. If the gums look unhealthy in the "after" photo, it should raise a red flag in your mind.

## **The comprehensive oral exam**

Your first appointment with a new dentist should be a *comprehensive oral exam*, an in-depth screening that enables the dentist to complete your dental records and develop a treatment plan for you. This is a good time to evaluate a dentist's manner and care and to make sure that this office is right for you.

Take note of the equipment used, too. A dentist who relies on older techniques can provide excellent care, but newer technology, some of which is described in this article, can make checkups faster, less painful, and more thorough.

To begin with, the dentist should take your medical and dental history, recording information about your previous dental work, any medical conditions or illnesses you have (or had), medicines you currently take, and allergies you have. (If you have an allergy to latex, mention it when you make the appointment so the office can prepare for your visit.) It's important that you state how long you have had diabetes, how you control it, and any problems or difficulties you have had recently. The dentist or dental hygienist should follow up on these questions at every visit.

# Take Action Now!

We offer a full range of dental services and **we absolutely never pressure our patients**. Ultimately our only job is to make sure you have all the information you need to make an informed decision.

**So call today and start on the road to a more confident you!**