Ten Facts That You Need to Know If You Have a Gum Problem

This booklet will give you the facts about periodontal problems, and how you can correct them safely, quickly, and comfortably.

For the patient of

James Rodriguez, DDS, PC 2375 Richmond Road Staten Island, New York 10306 (718) 667 1075 You're reading about periodontal problems. Congratulations! Bet you thought that this was something that you'd never want to read. So, here's your first job. Make sure that everything here makes sense to you. If it doesn't, stop. If you need to look up a word in the dictionary, that's okay. My job is to make this booklet very user friendly. That means no big words, no fancy concepts. This is supposed to be down to earth. If you like it, tell me. If you don't, tell me. I can change anything in this in a flash, the benefits of modern computers.

Here are the things that I will cover.

- 1. Why you get gum disease
- 2. The different kinds of gum disease
- 3. The connection between gum disease and heart disease
- 4. Why some gum problems are not really a disease, but they need to be treated anyway
- 5. Why teeth look too short and what you can do about it
- 6. Why teeth look too long and what you can do about it
- 7. What's this thing called "crown lengthening?"
- 8. Why non-surgical treatment is best for some problems
- 9. Why surgical treatment is best for some problems
- 10. Why you shouldn't save a tooth "at all costs."

Why you get gum disease

Have you been put on the guilt trip? That's right. The plaque guilt trip abounds. Your gums bleed a little bit, the hygienist looks at you and says, "You're not flossing well enough." And worse, "If you don't do any better, Dr. Rodriguez will have to send you to the gum specialist." Ah, a fate worse than death, being sent to the gum specialist. Is it any wonder that people walk into my office frightened? I'll bet you're a little frightened too. That's okay. We're often frightened of the unknown. Here's what our patients have said just for a little reassurance.

Maria (not her real name) says, "I keep returning to Dr. Rodriguez's office for cleaning because of the thoroughness of his staff. I had terrible gum problems until I started coming to Dr. Rodriguez. My gums are healthy now, thanks to Dr. Rodriguez, Fran, Jennifer and Rebecca."

Carl (again not a real name) says, "I've been coming to Dr. Rodriguez since 2003, and he has done everything possible that could be done to rebuild and get my mouth in shape. I am glad he is younger than I am because I don't want him to retire. I have had repeated <u>laser gum procedures</u> done and Dr. Rodriguez always follows up that evening by calling me. I find him and his staff very friendly, knowledgeable, professional, and they make you feel very comfortable. I highly recommend Dr. Rodriguez and his staff to anyone."

<u>Plaque</u> is a cause of periodontal disease. And if you have plaque, you are putting yourself at higher risk. But let's be clear about this risk. If you watch the commercials, you'd think that everyone is running around with periodontal disease. Well, they aren't. About 15% of the people in this country have periodontal disease (periodontitis), the

disease that causes loss of the bone support for a tooth. The rest of us have gingivitis, a mild swelling of the gums but no bone loss.

If you look at the commercials, they talk about toothbrushes that control gingivitis, toothpastes that control gingivitis, mouthwashes that control gingivitis, Water Pic*s that control gingivitis. You name it. They have everything that controls gingivitis. Over 90% of us have gingivitis. You figure it out. 90% have gingivitis; 15% have periodontitis. They never advertise anything that controls periodontitis. So they can treat something that doesn't really cause a major problem, but the major problem is really not controlled by these products. Sounds a little fishy, huh? Well, if you can sell it, market it. And that's what all these manufacturers have done; they've invented products. They might be good products. But they won't get to the source of your periodontal disease. Oh yes, there is one thing. It's a pill. There's always a pill. This pill helps to prevent your connective tissues from going through the normal processes of breakdown and repair. It's advertised for periodontal disease but it is not specific to periodontal problems. It works for only very specific forms of periodontal disease. I have been using the same medications for years with good results in only a small subset of patients with periodontal disease. It is already not recommended for people who have lung problems. The reason for this is that the pill interferes with normal tissue repair. Who knows what other precautions will be discovered? So the pill should be reserved for the most severe cases that don't respond to good, every day periodontal treatment.

What are the leading causes of periodontitis (loss of bone support)?

- 1. Genetics
- 2. Smoking
- 3. (and a distant 3 at that) Plaque

So, <u>a family history of periodontitis makes you more prone to getting periodontitis</u>. And if you're a smoker, you've already been beaten up about smoking for other health problems. And now you have one more health problem that's related to smoking, that's tooth loss. Sorry, I only report the data.

So, if you're prone to periodontal disease from genetics and smoking, what can gum treatment do? Well, you can't change your genetics. I hope that you'll stop smoking. The only thing that I can do is to treat the disease itself that is fueled by bacteria below the gum line called plaque. And it's plaque that's the only thing that we can control. Plaque becomes hardened on the root of the tooth below the gum line. That hardened plaque is called calculus. Calculus is rough, like tiny grains of sand, and collects more plaque. The plaque and calculus need a place to hide out, so they dissolve a little of the bone below the gum line, hide and do their thing, and dissolve a little more of the bone. That creates a crevice or space (we call it a "pocket") between the gum and the tooth. As the pocket becomes deeper and deeper, the tooth can become loose. The bigger the pocket the looser the tooth. It's a pretty simple concept.

Once that plaque fueled infection starts, we have to get that plaque and calculus out. That's the only way the pocket will heal. For a discussion on how we do that, please go further in this booklet, where I'll go into non-surgical and surgical treatment.

The different kinds of gum disease

Let's go over the different kinds of periodontal disease. By the way, periodontal comes from two words, perio-around and dont-tooth. So if we're looking at periodontal problems, we're looking at areas around the tooth. That means on the outside of the tooth. So what's on the outside of the tooth? Well, if you look under the gum line, there's the root of your tooth, there's the bone around the root, and fibers called ligaments to connect the root to the bone. By the way, the root is not the same as root canal. The root canal is a tube that goes through the center of the root and has nerves and blood vessels. Take a look at the picture on the next page.

The different kinds of periodontal disease are the following:

Chronic Periodontitis— the usually gradual loss of the ligament and bone support for the tooth. It creates a pocket that is occupied by bacterial plaque and calculus.

Acute periodontitis— a painful swelling of the gum tissue caused by bacteria that's trapped below the gum line.

Gingivitis—the non-painful swelling of the gum tissue without any underlying bone or ligament damage

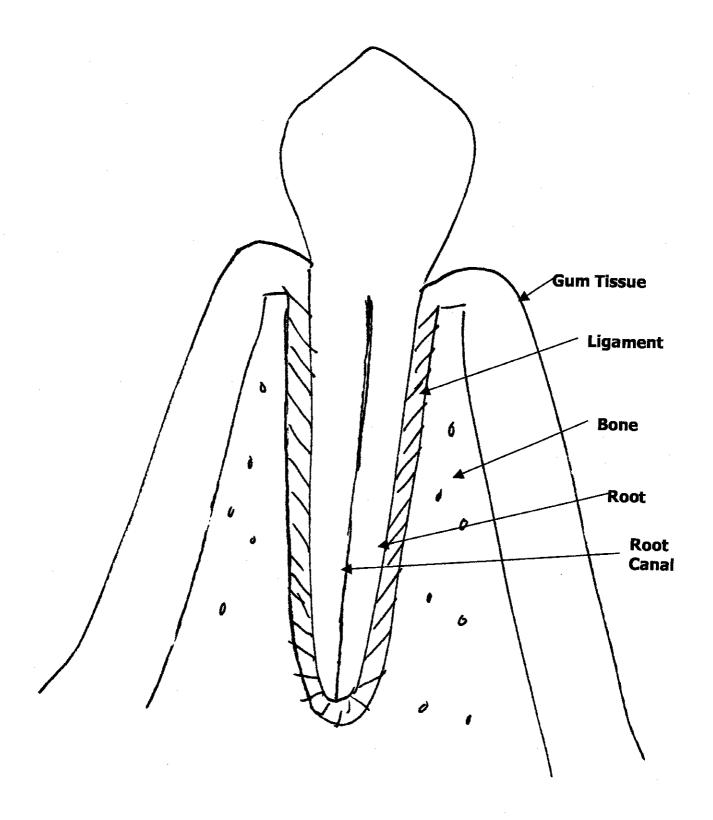
Apical periodontitis—the loss of bone support at the end of the root caused by a dead nerve within the root canal of the tooth

There are other relatively rare problems that we see from time to time. What you're seeing is the basics and covers the vast majority of the patients that we see.

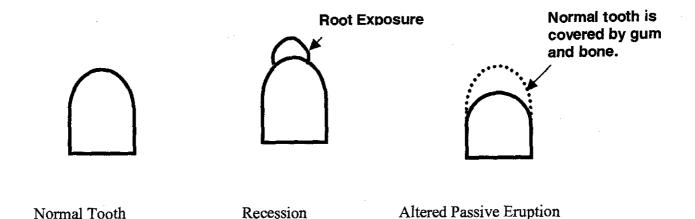
Why some gum problems are not really a disease, but they need to be treated anyway

There are a host of other periodontal problems, but I don't want you to confuse them with a disease. Here are the non-disease periodontal problems that, while not a disease, still threaten the tooth and need to be recognized and addressed.

Recession—the exposure of the root surface by the retraction of the gum tissue. Recession is most often caused by a thin layer of bone under the gum line, which wears away as we get older. The exposure of the root surface to the outside can be dangerous because the roots are softer than the enamel of the tooth. They are therefore prone to developing wear, grooves, and sensitivity. They can wear so much that the teeth break. Recession is usually a genetic problem. It can sometimes be worsened with overzealous tooth brushing, and/or clenching the teeth.



Altered Passive Eruption—the opposite of recession. There is a very thick layer of bone under the gum line. It results in the "gummy smile" and short appearing teeth.



Recession results in exposure of the root surface. The root surface is softer than tooth enamel. It is much more prone to attacks from acids in the mouth as well as tooth brushing forces. The root continues to wear away, often causing sensitivity in the tooth. Using fluoride treatments in the office and at home will help reduce the sensitivity. The gum tissue and the bone tissue are weak, and that's why you have the problem.

If this progresses too far, treatment for the problem will involve a trip to the gum specialist. He or she will perform a **soft tissue graft**, where strong gum tissue from another part of the mouth is moved to the weakened area. If the problem is caught early enough, you can have the gum tissue rebuilt to cover the root surface. These soft tissue grafts are very predictable and are long lasting.

Altered Passive Eruption is just the opposite of recession. Here you have too much gum and bone. The tooth appears short. It really isn't. It's just hiding under overabundant gum tissue. When it happens on the front teeth, they appear squat. When it happens on the back teeth, it involves more than the appearance. The problem is cavities. Cavities that would ordinarily be easy to reach are now buried under gum tissue. It makes doing a filling very difficult for the dentist, and makes home care very difficult as well. Sometimes the filling needs to be placed so deep that the gums bleed and there's soreness when you chew.

The treatment for altered passive eruption is surgical exposure of the tooth by removing the excess gum and bone. It sounds a little rough, but these are some of the most comfortable surgical procedures that we do, since we can use our **SoftLase* dental** laser.

The relationship between periodontal disease and heart disease

There is a relationship between periodontal disease and heart disease. There is not enough evidence to clearly demonstrate a cause and effect relationship, but there is some evidence leaning in that direction.

Here's what has been found:

Periodontitis causes the liver to secrete a protein called C-reactive protein. This protein causes the body to fight the periodontal infection by producing inflammation. Inflammation moves cells to an infected site for the purpose of fighting the infection. The infection, however, is the plaque on the teeth. The inflammatory cells can't "jump" from the gum and bone to the tooth. (That's why we need to have our teeth cleaned.) Anyway, the C-reactive protein doesn't just go to the gums, it goes everywhere including the coronary arteries. The C-reactive protein becomes lodged in the walls of those arteries, causing the walls to be rough and inflamed. Other proteins collect on the roughened walls and the arteries get narrower. This is coronary artery disease.

What's interesting is that when periodontitis is treated, there is less C-reactive protein circulating around the body and less in the coronary arteries.

The other piece of compelling evidence is this: the specific bacteria associated with periodontal disease <u>has been found in the heart</u>. There's only one place that bacteria could have come from, and that's the periodontal pocket.

What's this thing called "crown lengthening?"

Crown lengthening! What a confusing term! First of all, there are so many definitions of crown. If we don't know the definitions of crown, how should we know what crown lengthening is? So let's do what we should always do when we don't understand something—define our terms or look them up in a good dictionary. For now, I'll give you the definitions and there are three worth noting in dentistry.

Crown, definition 1—The part of the tooth that's above the gum line. In other words, this is the part of the tooth that you can see. It's called the *clinical crown*.

Crown, definition 2—The part of the tooth that's covered with enamel. It's called the anatomic crown. So if part of the enamel is under the gum line, it means that the anatomic crown is longer than the clinical crown. That's another definition for altered passive eruption, which is covered in the last chapter.

Crown, definition 3—An artificial covering for a tooth that has broken down. It is made out of a variety of materials, but is usually gold and porcelain or porcelain alone. It's often called a *cap*.

There are times when I'll see a patient for a crown lengthening consultation, and the damage to the tooth is so great that I would have to remove a great deal of bone, resulting in a weaker tooth or a gum line that would be esthetically changed. If that's the case, I'll recommend preserving the bone by extracting the tooth and placing a titanium metal post in the bone called a dental implant. Your dentist then uses the dental implant to support the new crown (cap). I have an entire booklet on dental implants. Please don't hesitate to ask for one if you'd like it for yourself or for a friend or family member.

Crown lengthening is also done for treatment of altered passive eruption. By keeping the proper amount of bone and removing the excess bone, the gum tissue then lies at a new position on the tooth, restoring the tooth to its correct length.

Why non-surgical treatment is best for some problems

When do you do non-surgical treatment, and when do you do surgical treatment? I must say that this is a controversy. As I write this, I just saw a nice woman for a third opinion. She wouldn't tell me anything about the first two opinions, nor would she tell me what treatment she had done. That's a difficult game for me to play, but I decided to play anyway. (Besides that, my assistant gave me enough cues to let me know what had happened before to this patient. Do you really think that our staff doesn't communicate with the doctor? Who do you think pays them? Don't tell him is not a part of the language we speak in our office, and for good reason. If I don't know something about you, I don't know how to evaluate your response to whatever you don't want me to know. If you've had periodontal treatment with a periodontist, or another general dentist, that's absolutely fine. I want to know your response to that treatment before I can make appropriate recommendations for treatment in our office.)

Anyway, I did the full periodontal examination and looked at the xrays that had been taken by someone else. What I saw in the examination looked much better than what I saw in the xrays. So, even without my beautiful, loyal, skilled assistant, I already knew that this woman had some treatment before she saw me. So what I saw was a healing state. The patient was doing better now than before her previous treatment. That's good! The previous dentist did a great job.

Now here's her true story. She saw a periodontist who recommended doing a non-surgical procedure first to see how well things would heal before deciding on surgery. The periodontist saw an improved condition, but there were still some periodontal pockets. He decided that the best way to treat this would be to surgically eliminate the pockets. That's a very common approach. She saw a second periodontist who recommended much the same, but surgical treatment of fewer teeth. So she sought me for a third opinion. She obviously didn't want surgery or she would have stopped at opinion 1 or opinion 2. Now tell me something. She obviously didn't want surgery. She showed good evidence of healing following the first periodontist's treatment. Is there

any harm in waiting to see if the response might get even better? The answer is a clear NO. There absolutely is no harm done. I can see her every three months for a cleaning. She can perform good home care, which by the way was excellent, and I can see whether she heals further. She may be able to maintain things exactly as is or improve without my touching her with a scalpel.

Therefore my rule #1 for chronic periodontitis is—If a patient shows substantial healing following non-surgical therapy, stop and wait.

It may continue to get better. If it doesn't get better, I can always do laser surgery later on. In the meantime, just get a good, thorough periodontal cleaning every 3 months or so, and let's observe the progress of the periodontal pockets. This isn't just my idea. There are reams of literature to support this approach.

Now let's go back a step. What is good non-surgical therapy and where does it apply? If a patient has lost bone support, and has pockets with calculus and plaque, he is a candidate for non-surgical therapy. That is a very plain rule. The purpose of non-surgical therapy is to get as much of the calculus and plaque out of the pocket as possible so that the gums and bone will heal.

Non-surgical therapy depends upon three things:

- 1. The skill of the therapist
- 2. The availability of a wide variety of sharp instruments that can get into any nook or cranny that's present in the pocket
- 3. The ability to find the plaque and calculus
- 4. The ability to sterilize the pocket with a soft tissue laser.
- 5. Thorough follow-up and frequent cleanings to remove new plaque and calculus.

#3 has improved recently. Up until now, we relied upon "feeling" the calculus on the root surface. We know that we can't feel calculus very well any more than you can feel your way around a dark room in a strange house. The literature proves that beyond 4 mm. we can't clean a pocket very well at all by feel.

Why surgical treatment is best for some problems

Why do you need surgery? That's a good question. What does "need" mean? Let's not get carried away. This is not a life or death situation. These are your teeth. I know that we get carried away about saving your teeth, but this is elective. You'll survive without teeth. I quickly state however that you'll likely live a shorter life without teeth. There's data to show that. So when you are doing surgery for your teeth, why do you do it?

Here are the reasons:

- 1. The periodontist needs to see below the gum line to get the tooth cleaned.
- 2. When a person needs crown lengthening, what that's saying is that the cavity or the crack in the tooth is too deep to restore it properly. It means that the damage is so deep that it impinges on the bone. Or it may mean that the tooth is so badly damaged that if it were restored with a crown (def.3), the crown would not have enough tooth structure to grab on to and would fall off easily. So what do I do? I remove enough of the bone in the area of the cavity or crack so that your dentist can seal the tooth properly with a filling or a crown.
- 3. You have a good chance of regrowing the lost bone and lost ligament with surgical treatment.
- 4. You need to replace weak and deteriorated gum tissue with healthy gum tissue.
- 5. You need to make the tooth longer (crown lengthening)
- 6. You need a correction to cover exposed roots
- 7. You want to make your cosmetically short teeth longer and get rid of the "gummy smile."
- 8. You need to extract a bad tooth because the disease from the bad tooth is spreading to the neighboring tooth.
- 9. You need to replace a missing tooth or a badly damaged tooth with a dental implant.

If there is a non-surgical option available, explore it. If not, or if non-surgical treatment doesn't have a good prognosis, you might as well jump to the next step. It is far more predictable to do surgical treatment when the teeth and root surfaces are clean than to wait for an infection to occur.

Why you shouldn't save a tooth at all costs

We've grown up with the idea that we should do whatever is possible to save a tooth. There are crowns, root canals, and periodontal treatment, all of which developed in the 60's and improved into the 80's and 90's and continue to improve. But one thing has changed. **Dental implants have arrived.** They didn't just arrive. The new era of dental implants began in 1982. They are the most successful of all of the tooth replacement procedures. So now we have to weigh the following question: Is it better to preserve the tooth or to preserve the bone?

Here's a story that illustrates the question:

Jacqueline (not her real name) lost a tooth because of decay. It fractured and if I tried to save it, I would have had to remove supporting bone to expose more tooth structure, but her gum line would have changed as a result of this. She had a broad smile, and showed lots of her gum tissue. If I had changed her gum line, I would have permanently disfigured a beautiful woman. She didn't want to have the adjacent

teeth ground down for a permanent bridge (a wise choice). Why? The average bridge lasts about 7 years before damage to the supporting teeth occurs. Her best choice...a dental implant. In fact, Jacqueline was able to have her dental implant and temporary crown placed on the same day as she had her tooth extracted. Jacque; ine saw a specialist who extracted the tooth and placed the dental implant. Jacqueline then immediately saw me for the temporary crown. She was whole again with a pretty tooth in three hours.

All dentists are trained to save teeth. It's almost automatic to refer a patient to an endodontist (root canal specialist) when the decay goes so deep that the nerve is exposed. Sometimes, though, it's better to look at this badly diseased tooth before considering the root canal and ask:

Is this tooth really worth saving? Would a dental implant be more predictable?

It isn't enough to just consider preserving a tooth. We must also consider preserving the bone.

Do the above situations apply to you?

Here are some tips to ask your dentist:

- Ask your dentist to do a full periodontal probing examination once a year.
- Compare the findings of the previous probing examination with previous exams.
- Be sure to look at recession and compare those levels from examination to examination.
- Consider dental implants as the most predictable way of replacing any missing tooth.
- Before we complete the crown, did the cavity go so far below the gum line that crown lengthening might be a good idea?
- Look at the gum line, if it shows, and determine if its correction might enhance cosmetics. If the teeth are too short, the actual length of the tooth may be hidden by too much gum and/or bone.
- Before putting a filling in the root of a tooth, might it be more predictable to cover the root with gum tissue rather than a filling?

Your dentist has given this booklet to you because you have a problem. We can help you with your problem, and have helped thousands keep their teeth. So now is the time to call me if you haven't already. Share with us what you want, what you need. Help me customize a plan that's made expressly for you. Whether it's the best in non-surgical gum therapy, or the fanciest reconstruction, you've come to the right place.

Call Janet or Jane at 718 667 1075 and ask for a full gum tissue examination. You'll be glad that you did.